

Advanced Data Mining-Project

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Evaluate different algorithm (Random forest, Boosting, SVM and Neural network) from ML to predicate Puma Indian diabetes base upon patient's healthy measurement by using caret package from R

```
suppressMessages(library(caret))
```

```
## Warning: package 'ggplot2' was built under R version 3.2.4
```

```
db = read.csv(file="C:/Users/jzhangn/Documents/diabetes.csv", header=TRUE, sep=",")  
head(db)
```

```
##   Nof.Pregnant plasma.glucose.concentra blood.pressure Tri.skin.Thickness  
## 1           6           148           72           35  
## 2           1           85           66           29  
## 3           8          183           64           0  
## 4           1           89           66           23  
## 5           0          137           40           35  
## 6           5          116           74           0  
##   serum.insulin body.mass.index diabetes.pedigree.func age Class  
## 1           0          33.6           0.627 50     1  
## 2           0          26.6           0.351 31     0  
## 3           0          23.3           0.672 32     1  
## 4          94          28.1           0.167 21     0  
## 5         168          43.1           2.288 33     1  
## 6           0          25.6           0.201 30     0
```

```
dim(db)
```

```
## [1] 768   9
```

```
summary(db)
```

```
##   Nof.Pregnant   plasma.glucose.concentra blood.pressure
##   Min.      : 0.000   Min.      : 0.0           Min.      : 0.00
##   1st Qu.: 1.000   1st Qu.: 99.0           1st Qu.: 62.00
##   Median : 3.000   Median :117.0           Median : 72.00
##   Mean    : 3.845   Mean    :120.9           Mean    : 69.11
##   3rd Qu.: 6.000   3rd Qu.:140.2           3rd Qu.: 80.00
##   Max.     :17.000   Max.     :199.0           Max.     :122.00
##   Tri.skin.Thickness serum.insulin   body.mass.index diabetes.pedigree.func
##   Min.      : 0.00    Min.      : 0.0   Min.      : 0.00   Min.      :0.0780
##   1st Qu.: 0.00    1st Qu.: 0.0   1st Qu.:27.30   1st Qu.:0.2437
##   Median :23.00    Median : 30.5   Median :32.00   Median :0.3725
##   Mean    :20.54    Mean    : 79.8   Mean    :31.99   Mean    :0.4719
##   3rd Qu.:32.00    3rd Qu.:127.2   3rd Qu.:36.60   3rd Qu.:0.6262
##   Max.     :99.00    Max.     :846.0   Max.     :67.10   Max.     :2.4200
##       age          Class
##   Min.      :21.00   Min.      :0.000
##   1st Qu.:24.00   1st Qu.:0.000
##   Median :29.00   Median :0.000
##   Mean     :33.24   Mean      :0.349
##   3rd Qu.:41.00   3rd Qu.:1.000
##   Max.     :81.00   Max.      :1.000
```

```
attach(db)
Class =as.factor(ifelse(Class == 1,"Y","N"))
head(db)
```

```
##   Nof.Pregnant plasma.glucose.concentra blood.pressure Tri.skin.Thickness
## 1             6             148             72             35
## 2             1             85             66             29
## 3             8            183             64             0
## 4             1             89             66             23
## 5             0            137             40             35
## 6             5            116             74             0
##   serum.insulin body.mass.index diabetes.pedigree.func age Class
## 1             0            33.6             0.627  50     1
## 2             0            26.6             0.351  31     0
## 3             0            23.3             0.672  32     1
## 4            94            28.1             0.167  21     0
## 5           168            43.1             2.288  33     1
## 6             0            25.6             0.201  30     0
```

```
db = db[-9]
cor(db)
```

```
##                                Nof.Pregnant plasma.glucose.concentra
## Nof.Pregnant                  1.000000000                0.12945867
## plasma.glucose.concentra    0.12945867                1.000000000
## blood.pressure              0.14128198                0.15258959
## Tri.skin.Thickness          -0.08167177                0.05732789
## serum.insulin               -0.07353461                0.33135711
## body.mass.index             0.01768309                0.22107107
## diabetes.pedigree.func      -0.03352267                0.13733730
## age                         0.54434123                0.26351432
##                                blood.pressure Tri.skin.Thickness serum.insulin
## Nof.Pregnant                0.14128198                -0.08167177    -0.07353461
## plasma.glucose.concentra    0.15258959                0.05732789    0.33135711
## blood.pressure              1.000000000                0.20737054    0.08893338
## Tri.skin.Thickness          0.20737054                1.000000000    0.43678257
## serum.insulin               0.08893338                0.43678257    1.000000000
## body.mass.index             0.28180529                0.39257320    0.19785906
## diabetes.pedigree.func      0.04126495                0.18392757    0.18507093
## age                         0.23952795                -0.11397026   -0.04216295
##                                body.mass.index diabetes.pedigree.func
## Nof.Pregnant                0.01768309                -0.03352267
## plasma.glucose.concentra    0.22107107                0.13733730
## blood.pressure              0.28180529                0.04126495
## Tri.skin.Thickness          0.39257320                0.18392757
## serum.insulin               0.19785906                0.18507093
## body.mass.index             1.000000000                0.14064695
## diabetes.pedigree.func      0.14064695                1.000000000
## age                         0.03624187                0.03356131
##                                age
## Nof.Pregnant                0.54434123
## plasma.glucose.concentra    0.26351432
## blood.pressure              0.23952795
## Tri.skin.Thickness          -0.11397026
## serum.insulin               -0.04216295
## body.mass.index             0.03624187
## diabetes.pedigree.func      0.03356131
## age                         1.000000000
```

```
db = cbind(db, Class)
attach(db)
```

```
## The following object is masked _by_ .GlobalEnv:
##
##      Class
```

```
## The following objects are masked from db (pos = 3):
##
##      age, blood.pressure, body.mass.index, Class,
##      diabetes.pedigree.func, Nof.Pregnant,
##      plasma.glucose.concentra, serum.insulin, Tri.skin.Thickness
```

```
head(db)
```

```
##   Nof.Pregnant plasma.glucose.concentra blood.pressure Tri.skin.Thickness
## 1             6             148             72             35
## 2             1             85             66             29
## 3             8            183             64             0
## 4             1             89             66             23
## 5             0            137             40             35
## 6             5            116             74             0
##   serum.insulin body.mass.index diabetes.pedigree.func age Class
## 1             0            33.6             0.627 50     Y
## 2             0            26.6             0.351 31     N
## 3             0            23.3             0.672 32     Y
## 4            94            28.1             0.167 21     N
## 5           168            43.1             2.288 33     Y
## 6             0            25.6             0.201 30     N
```

Split training and test

```
set.seed(1)
inTraining = createDataPartition(Class, p = .7, list = F)
training = db[inTraining,]
testing = db[-inTraining,]
```

use different traing control (Kappa or ROC)

```
fitControl.1 = trainControl(method = 'repeatedcv', number = 10, repeats = 5)
fitControl.2 = trainControl(method = "repeatedcv", repeats = 5, classProbs = TRUE, summaryFunc
tion= twoClassSummary)
```

1. RandomForest

```
library(pROC)
```

```
## Type 'citation("pROC")' for a citation.
```

```
##
## Attaching package: 'pROC'
```

```
## The following objects are masked from 'package:stats':
##
##   cov, smooth, var
```

```
set.seed(1)
rf.start.time.1 = proc.time()
rfFit1 = train(Class~., data=training, trControl = fitControl.1, verbose = F)
```

```
## Loading required package: randomForest
```

```
## randomForest 4.6-12
```

```
## Type rfNews() to see new features/changes/bug fixes.
```

```
##  
## Attaching package: 'randomForest'
```

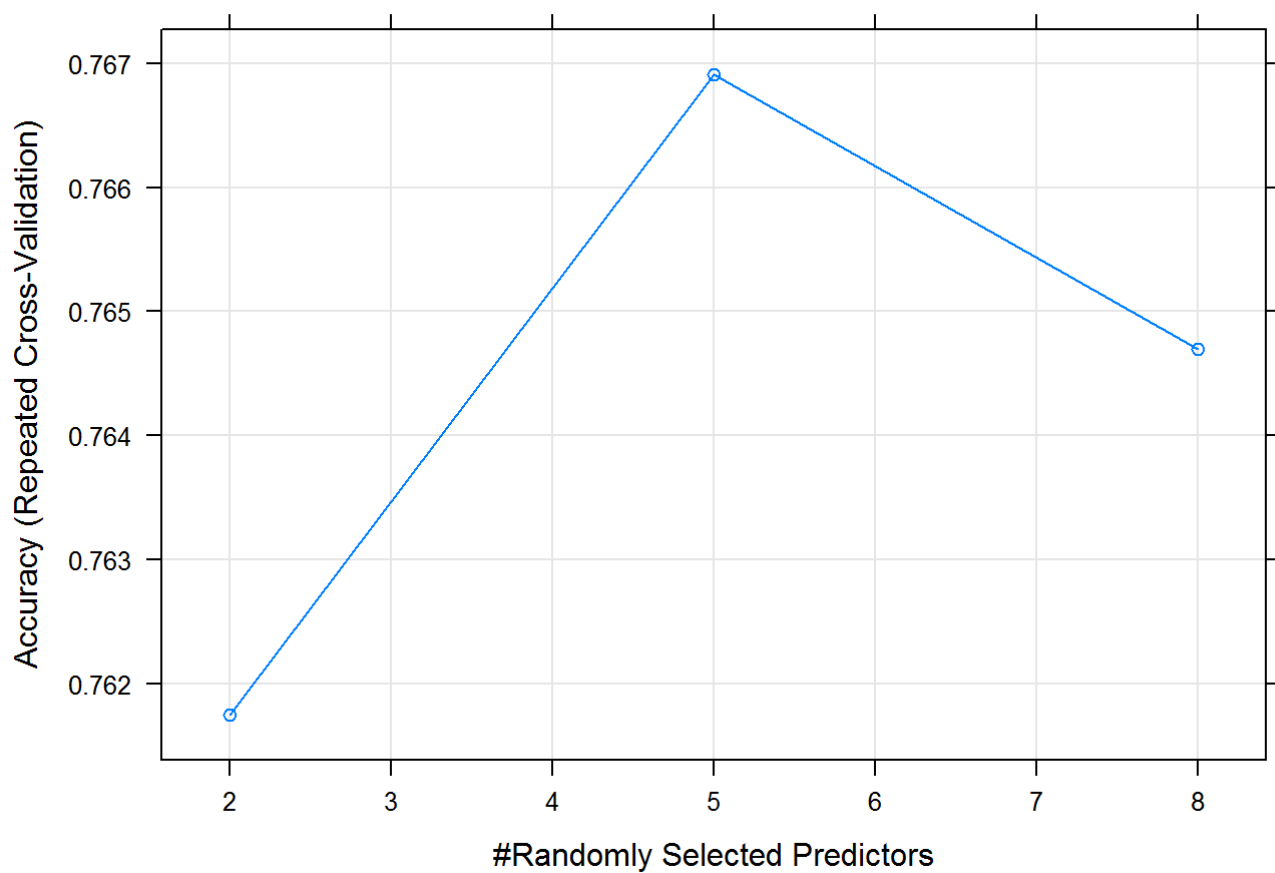
```
## The following object is masked from 'package:ggplot2':
```

```
##  
## margin
```

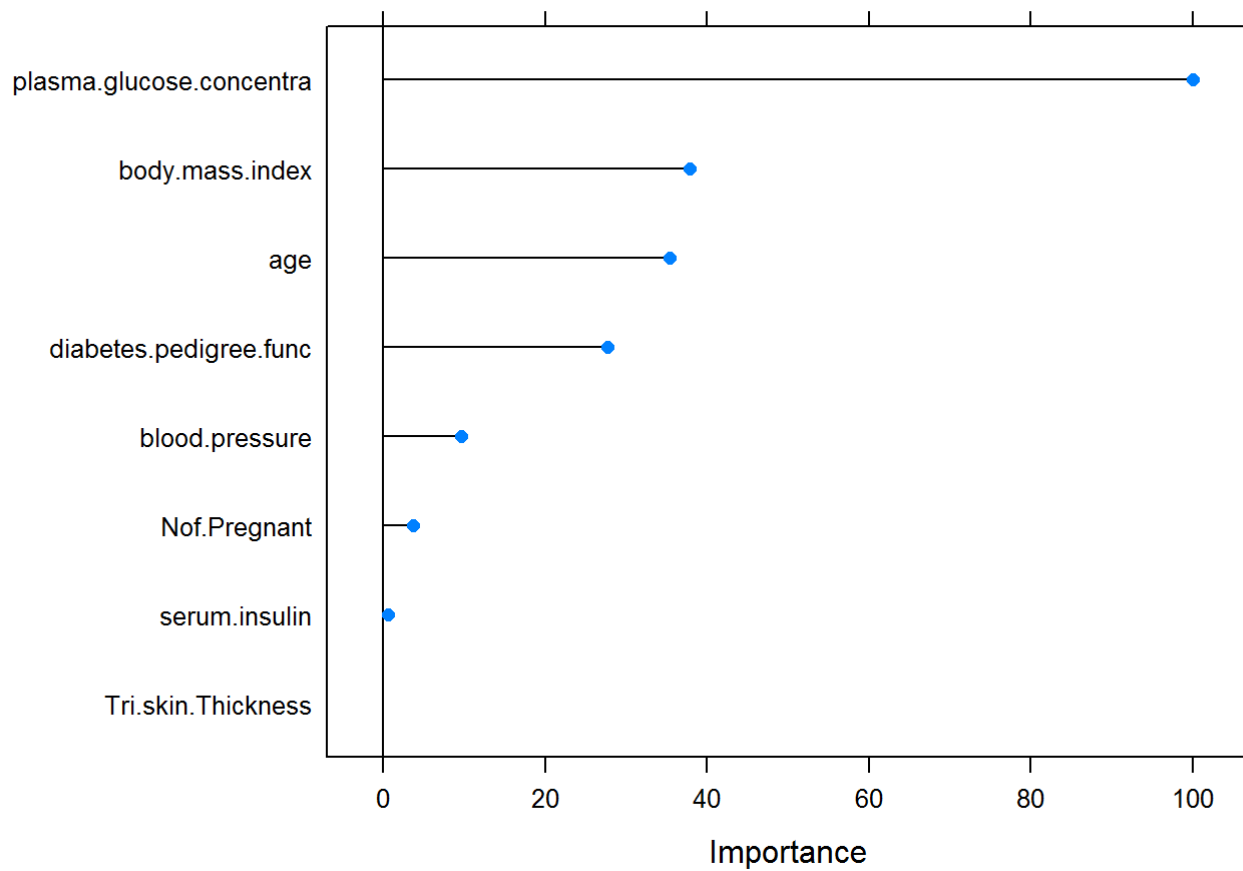
```
rf.total.time.1 = proc.time() - rf.start.time.1  
rf.total.time.1[3]
```

```
## elapsed  
## 44.04
```

```
plot(rfFit1)
```

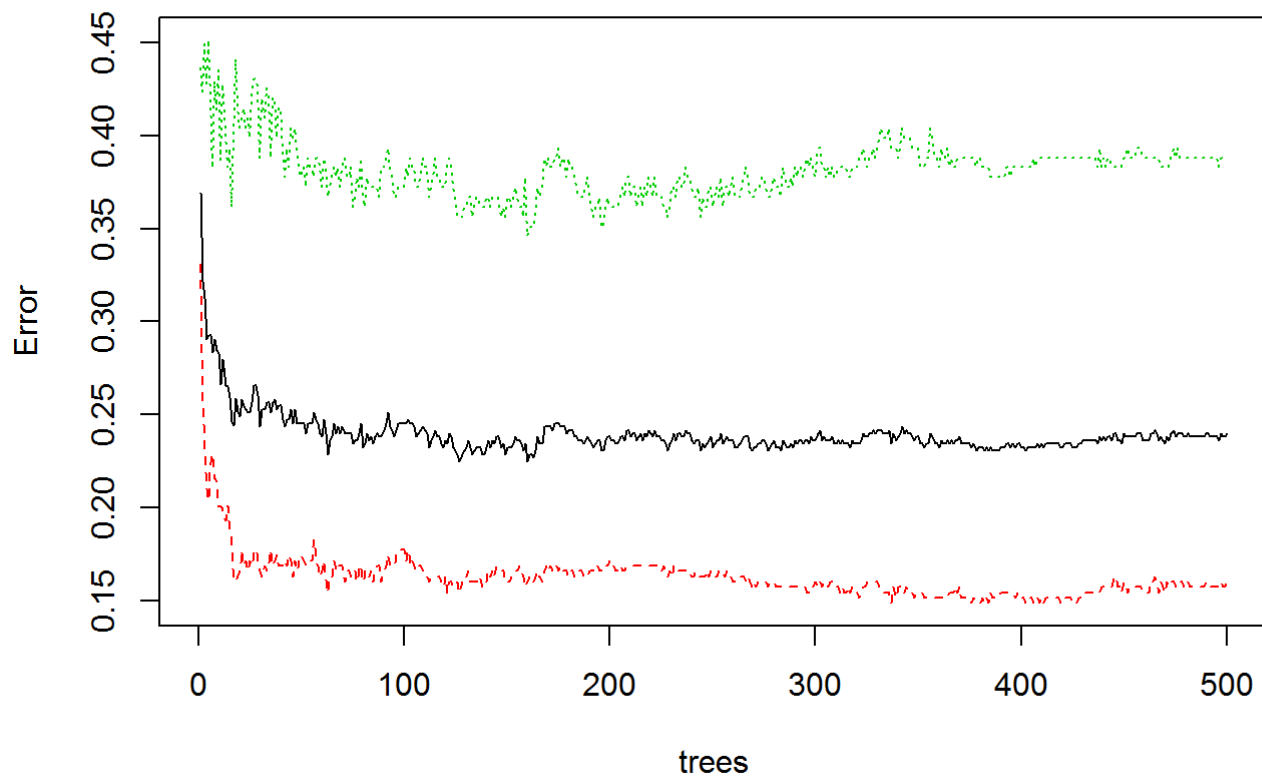


```
#Check variable importance  
plot(varImp(rfFit1))
```



```
plot(rfFit1$finalModel) #check classification error rate and # of trees used
```

rfFit1\$finalModel



#The train function can generate a candidate set of parameter values and the tuneLength argument controls how many are evaluated.

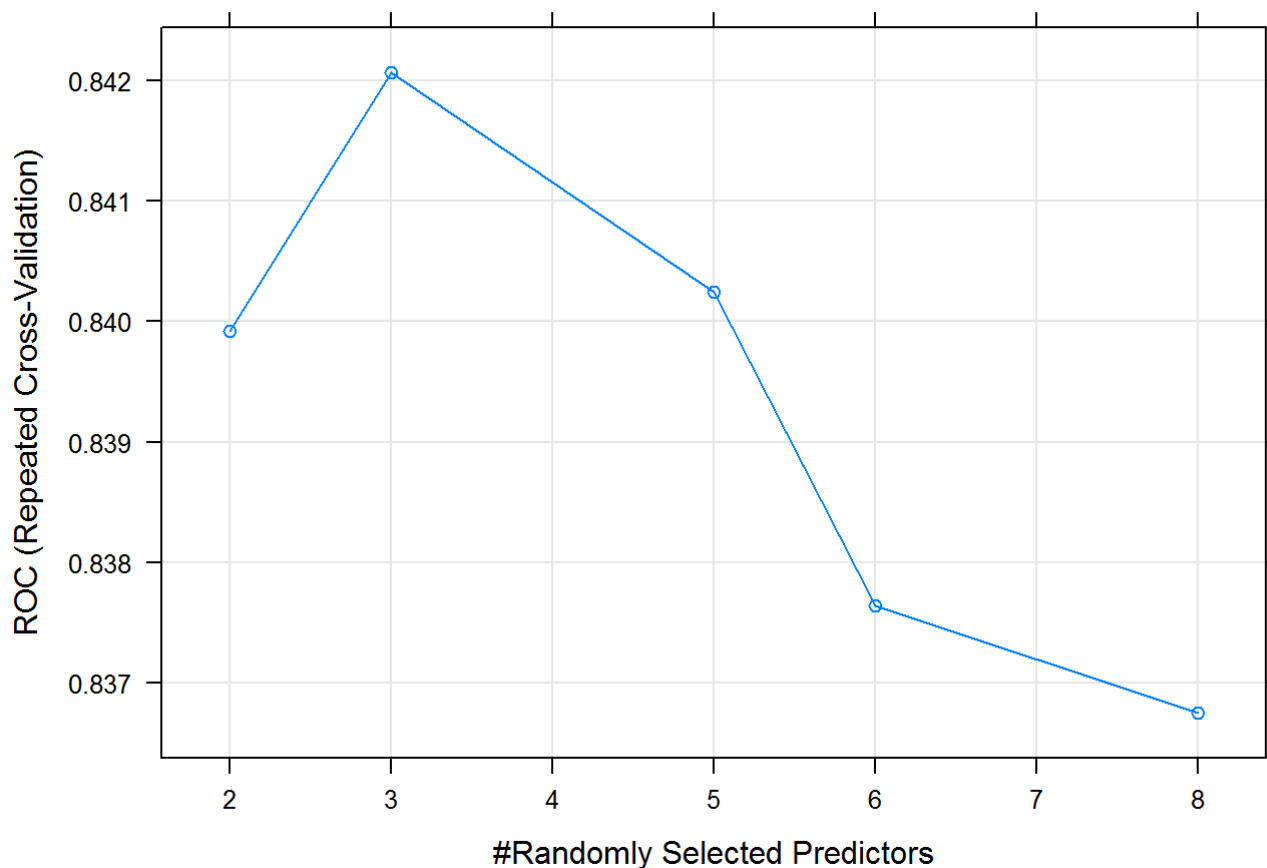
```
rf.start.time.2 = proc.time()
rfFit2 = train(Class~., data = training, method = "rf", tuneLength = 5, trControl =
fitControl.2, metric = "ROC", preProc = c("center", "scale"))
rf.total.time.2 = proc.time() - rf.start.time.2
rf.total.time.2[3]
```

```
## elapsed
## 69.92
```

```
rfFit2
```

```
## Random Forest
##
## 538 samples
## 8 predictor
## 2 classes: 'N', 'Y'
##
## Pre-processing: centered (8), scaled (8)
## Resampling: Cross-Validated (10 fold, repeated 5 times)
## Summary of sample sizes: 485, 484, 484, 484, 484, 484, ...
## Resampling results across tuning parameters:
##
## mtry ROC Sens Spec ROC SD Sens SD Spec SD
## 2 0.8399215 0.8491429 0.6120468 0.05769763 0.06903632 0.1200342
## 3 0.8420693 0.8445714 0.6119883 0.05821169 0.07166956 0.1149005
## 5 0.8402448 0.8428571 0.6267251 0.05964978 0.06562423 0.1140368
## 6 0.8376416 0.8428571 0.6193567 0.06063400 0.06737785 0.1105091
## 8 0.8367469 0.8428571 0.6214035 0.06148074 0.06811559 0.1056342
##
## ROC was used to select the optimal model using the largest value.
## The final value used for the model was mtry = 3.
```

```
#show the relationship between the resampled performance value and predictors
plot(rfFit2)
```




```
#the default behavior is to calculate the predicted class
```

```
rfClass=predict(rfFit2, newdata=testing)
```

```
#to compute class probabilities from the model.
```

```
rfProbs <- predict(rfFit2, newdata = testing, type = "prob")
```

```
head(rfProbs)
```

```
##      N      Y
```

```
## 2 0.888 0.112
```

```
## 3 0.372 0.628
```

```
## 4 0.990 0.010
```

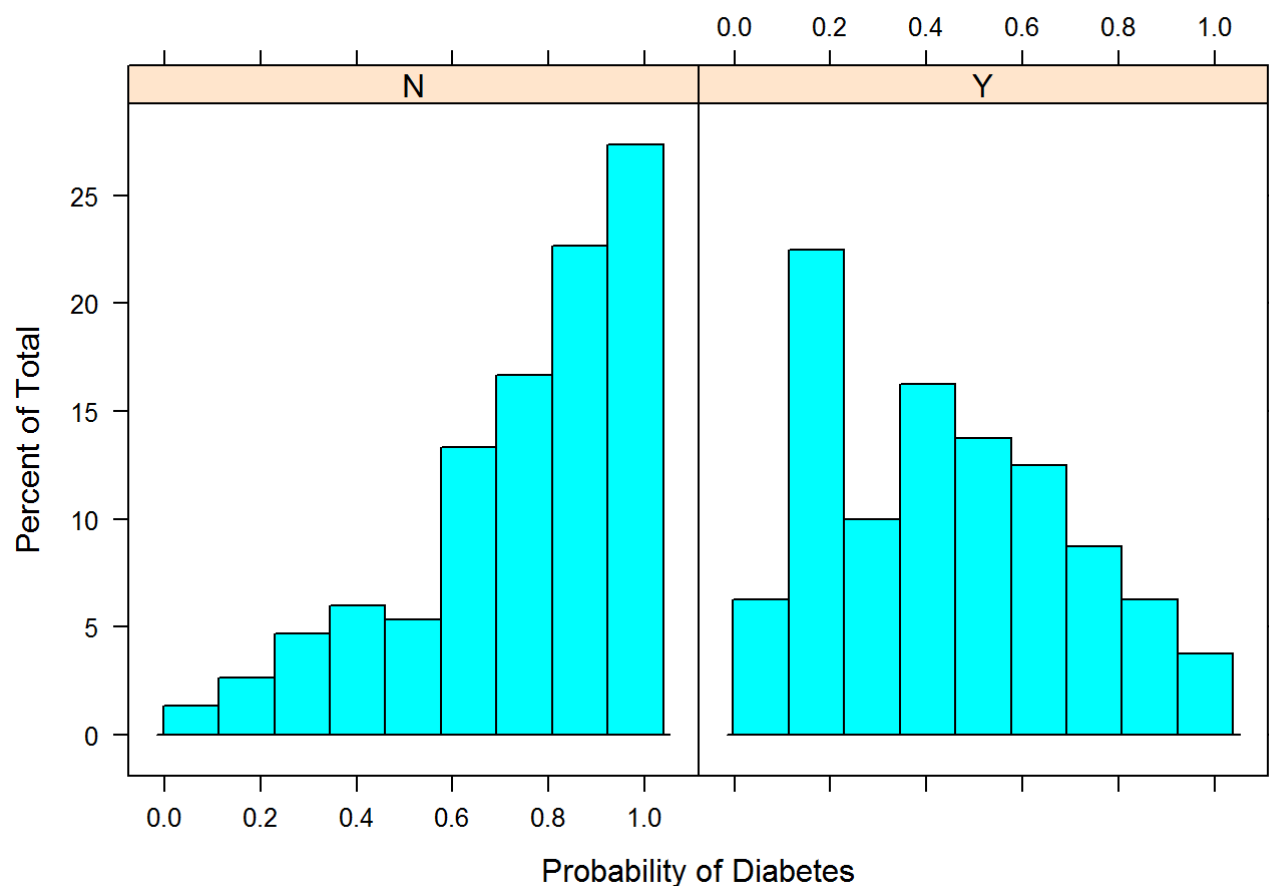
```
## 6 0.868 0.132
```

```
## 8 0.374 0.626
```

```
## 9 0.204 0.796
```

```
#Plot test probability
```

```
histogram(~rfProbs$N|testing$Class, xlab = "Probability of Diabetes")
```

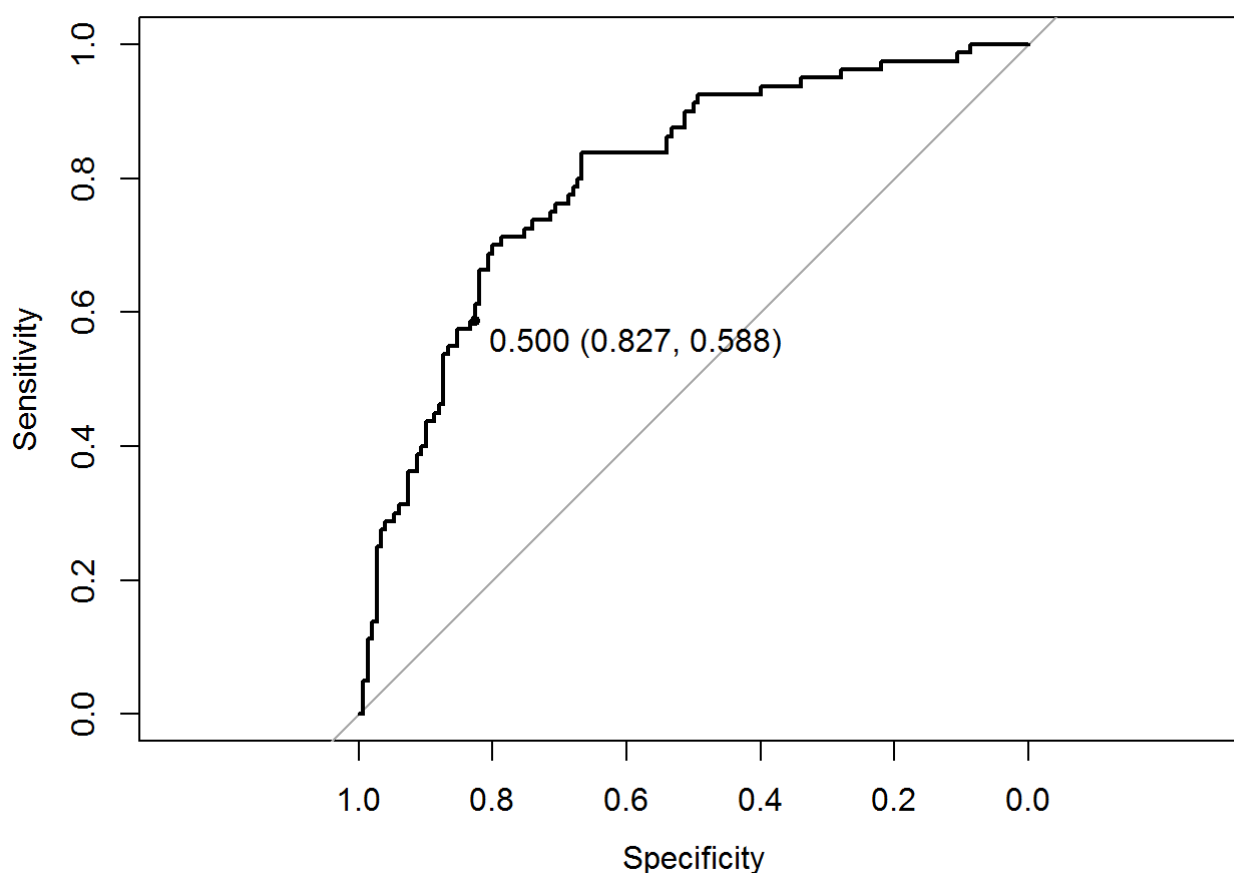


```
#Compute confusion matrix and associated statistics for the model fit
```

```
r.c = confusionMatrix(data = rfClass, testing$Class)
r.Accuracy = r.c$overall[1]
r.kappa = r.c$overall[2]
#plot ROC
rfROC <- roc(testing$Class, rfProbs[, 1], levels(testing$Class))
rfROC$auc
```

```
## Area under the curve: 0.802
```

```
plot(rfROC, type = "S", print.thres = .5)
```



```
##
## Call:
## roc.default(response = testing$Class, predictor = rfProbs[, 1],      controls = levels(testing
## $Class))
##
## Data: rfProbs[, 1] in 150 controls (testing$Class N) > 80 cases (testing$Class Y).
## Area under the curve: 0.802
```

2. Boosting

```
set.seed(1)
```

```
boost.start.time = proc.time()  
gbmFit = train(Class~., data = training, method = "gbm", tuneLength = 5, trControl = fitControl.  
2, metric = "ROC", preProc = c("center", "scale"))
```

```
## Loading required package: gbm
```

```
## Loading required package: survival
```

```
##  
## Attaching package: 'survival'
```

```
## The following object is masked from 'package:caret':  
##  
##   cluster
```

```
## Loading required package: splines
```

```
## Loading required package: parallel
```

```
## Loaded gbm 2.1.1
```

```
## Loading required package: plyr
```

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2550	nan	0.1000	0.0148
##	2	1.2239	nan	0.1000	0.0132
##	3	1.1959	nan	0.1000	0.0124
##	4	1.1756	nan	0.1000	0.0088
##	5	1.1529	nan	0.1000	0.0098
##	6	1.1353	nan	0.1000	0.0068
##	7	1.1195	nan	0.1000	0.0057
##	8	1.1042	nan	0.1000	0.0055
##	9	1.0903	nan	0.1000	0.0042
##	10	1.0794	nan	0.1000	0.0038
##	20	0.9800	nan	0.1000	0.0019
##	40	0.8938	nan	0.1000	-0.0011
##	60	0.8398	nan	0.1000	-0.0003
##	80	0.8124	nan	0.1000	-0.0006
##	100	0.7948	nan	0.1000	-0.0018
##	120	0.7723	nan	0.1000	-0.0020
##	140	0.7566	nan	0.1000	-0.0007
##	160	0.7457	nan	0.1000	-0.0005
##	180	0.7345	nan	0.1000	-0.0018
##	200	0.7244	nan	0.1000	-0.0019
##	220	0.7153	nan	0.1000	-0.0020
##	240	0.7067	nan	0.1000	-0.0010
##	250	0.7041	nan	0.1000	-0.0015

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2439	nan	0.1000	0.0231
##	2	1.2023	nan	0.1000	0.0155
##	3	1.1700	nan	0.1000	0.0163
##	4	1.1337	nan	0.1000	0.0152
##	5	1.1051	nan	0.1000	0.0107
##	6	1.0789	nan	0.1000	0.0109
##	7	1.0581	nan	0.1000	0.0087
##	8	1.0403	nan	0.1000	0.0065
##	9	1.0234	nan	0.1000	0.0049
##	10	1.0067	nan	0.1000	0.0058
##	20	0.9001	nan	0.1000	0.0012
##	40	0.7973	nan	0.1000	-0.0003
##	60	0.7448	nan	0.1000	-0.0011
##	80	0.7125	nan	0.1000	-0.0011
##	100	0.6850	nan	0.1000	-0.0004
##	120	0.6543	nan	0.1000	-0.0007
##	140	0.6298	nan	0.1000	-0.0018
##	160	0.6063	nan	0.1000	-0.0027
##	180	0.5790	nan	0.1000	-0.0007
##	200	0.5618	nan	0.1000	-0.0018
##	220	0.5483	nan	0.1000	-0.0022
##	240	0.5308	nan	0.1000	-0.0003
##	250	0.5211	nan	0.1000	-0.0015

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2438	nan	0.1000	0.0257
##	2	1.1906	nan	0.1000	0.0244

##	3	1.1520	nan	0.1000	0.0156
##	4	1.1198	nan	0.1000	0.0148
##	5	1.0866	nan	0.1000	0.0141
##	6	1.0671	nan	0.1000	0.0033
##	7	1.0446	nan	0.1000	0.0076
##	8	1.0216	nan	0.1000	0.0068
##	9	0.9969	nan	0.1000	0.0088
##	10	0.9740	nan	0.1000	0.0101
##	20	0.8457	nan	0.1000	0.0011
##	40	0.7399	nan	0.1000	-0.0029
##	60	0.6695	nan	0.1000	-0.0038
##	80	0.6144	nan	0.1000	-0.0028
##	100	0.5663	nan	0.1000	-0.0028
##	120	0.5273	nan	0.1000	-0.0011
##	140	0.4931	nan	0.1000	-0.0008
##	160	0.4560	nan	0.1000	-0.0018
##	180	0.4294	nan	0.1000	-0.0024
##	200	0.4041	nan	0.1000	-0.0012
##	220	0.3866	nan	0.1000	-0.0030
##	240	0.3687	nan	0.1000	-0.0018
##	250	0.3589	nan	0.1000	-0.0017

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2312	nan	0.1000	0.0263
##	2	1.1799	nan	0.1000	0.0184
##	3	1.1317	nan	0.1000	0.0157
##	4	1.0904	nan	0.1000	0.0139
##	5	1.0522	nan	0.1000	0.0158
##	6	1.0232	nan	0.1000	0.0095
##	7	0.9974	nan	0.1000	0.0095
##	8	0.9755	nan	0.1000	0.0056
##	9	0.9552	nan	0.1000	0.0072
##	10	0.9326	nan	0.1000	0.0064
##	20	0.8106	nan	0.1000	-0.0015
##	40	0.6976	nan	0.1000	-0.0017
##	60	0.6244	nan	0.1000	-0.0011
##	80	0.5636	nan	0.1000	-0.0026
##	100	0.5160	nan	0.1000	0.0000
##	120	0.4672	nan	0.1000	-0.0007
##	140	0.4260	nan	0.1000	0.0000
##	160	0.3919	nan	0.1000	-0.0009
##	180	0.3589	nan	0.1000	-0.0016
##	200	0.3344	nan	0.1000	-0.0009
##	220	0.3044	nan	0.1000	-0.0021
##	240	0.2808	nan	0.1000	-0.0011
##	250	0.2695	nan	0.1000	-0.0005

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2309	nan	0.1000	0.0259
##	2	1.1697	nan	0.1000	0.0252
##	3	1.1198	nan	0.1000	0.0187
##	4	1.0788	nan	0.1000	0.0190
##	5	1.0420	nan	0.1000	0.0161
##	6	1.0077	nan	0.1000	0.0122

##	7	0.9823	nan	0.1000	0.0054
##	8	0.9588	nan	0.1000	0.0034
##	9	0.9367	nan	0.1000	0.0048
##	10	0.9166	nan	0.1000	0.0041
##	20	0.7688	nan	0.1000	0.0004
##	40	0.6332	nan	0.1000	-0.0015
##	60	0.5399	nan	0.1000	-0.0020
##	80	0.4732	nan	0.1000	-0.0016
##	100	0.4254	nan	0.1000	-0.0020
##	120	0.3833	nan	0.1000	-0.0015
##	140	0.3420	nan	0.1000	-0.0019
##	160	0.3075	nan	0.1000	-0.0011
##	180	0.2789	nan	0.1000	-0.0017
##	200	0.2506	nan	0.1000	-0.0018
##	220	0.2274	nan	0.1000	-0.0025
##	240	0.2081	nan	0.1000	-0.0017
##	250	0.2003	nan	0.1000	-0.0009

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2574	nan	0.1000	0.0183
##	2	1.2179	nan	0.1000	0.0147
##	3	1.1916	nan	0.1000	0.0114
##	4	1.1680	nan	0.1000	0.0085
##	5	1.1483	nan	0.1000	0.0076
##	6	1.1297	nan	0.1000	0.0074
##	7	1.1120	nan	0.1000	0.0071
##	8	1.0926	nan	0.1000	0.0083
##	9	1.0770	nan	0.1000	0.0048
##	10	1.0624	nan	0.1000	0.0067
##	20	0.9601	nan	0.1000	0.0009
##	40	0.8735	nan	0.1000	0.0003
##	60	0.8271	nan	0.1000	0.0007
##	80	0.7953	nan	0.1000	0.0005
##	100	0.7730	nan	0.1000	-0.0007
##	120	0.7537	nan	0.1000	-0.0026
##	140	0.7367	nan	0.1000	-0.0010
##	160	0.7268	nan	0.1000	-0.0003
##	180	0.7188	nan	0.1000	-0.0022
##	200	0.7086	nan	0.1000	-0.0010
##	220	0.7004	nan	0.1000	-0.0007
##	240	0.6933	nan	0.1000	-0.0005
##	250	0.6873	nan	0.1000	-0.0010

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2465	nan	0.1000	0.0217
##	2	1.2018	nan	0.1000	0.0203
##	3	1.1659	nan	0.1000	0.0163
##	4	1.1371	nan	0.1000	0.0116
##	5	1.1082	nan	0.1000	0.0127
##	6	1.0818	nan	0.1000	0.0114
##	7	1.0594	nan	0.1000	0.0098
##	8	1.0379	nan	0.1000	0.0090
##	9	1.0199	nan	0.1000	0.0069
##	10	1.0028	nan	0.1000	0.0071

##	20	0.8924	nan	0.1000	0.0012
##	40	0.7867	nan	0.1000	-0.0014
##	60	0.7303	nan	0.1000	-0.0002
##	80	0.6886	nan	0.1000	-0.0030
##	100	0.6483	nan	0.1000	-0.0009
##	120	0.6257	nan	0.1000	0.0003
##	140	0.6035	nan	0.1000	-0.0015
##	160	0.5829	nan	0.1000	-0.0015
##	180	0.5670	nan	0.1000	-0.0021
##	200	0.5485	nan	0.1000	-0.0018
##	220	0.5277	nan	0.1000	-0.0009
##	240	0.5117	nan	0.1000	-0.0014
##	250	0.5031	nan	0.1000	-0.0007

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2337	nan	0.1000	0.0242
##	2	1.1933	nan	0.1000	0.0158
##	3	1.1453	nan	0.1000	0.0215
##	4	1.1153	nan	0.1000	0.0095
##	5	1.0783	nan	0.1000	0.0149
##	6	1.0509	nan	0.1000	0.0082
##	7	1.0193	nan	0.1000	0.0116
##	8	0.9983	nan	0.1000	0.0076
##	9	0.9741	nan	0.1000	0.0089
##	10	0.9538	nan	0.1000	0.0065
##	20	0.8283	nan	0.1000	0.0033
##	40	0.7234	nan	0.1000	-0.0005
##	60	0.6514	nan	0.1000	-0.0013
##	80	0.6069	nan	0.1000	-0.0004
##	100	0.5680	nan	0.1000	-0.0029
##	120	0.5280	nan	0.1000	-0.0020
##	140	0.4962	nan	0.1000	-0.0025
##	160	0.4653	nan	0.1000	-0.0020
##	180	0.4419	nan	0.1000	-0.0016
##	200	0.4182	nan	0.1000	-0.0021
##	220	0.3944	nan	0.1000	-0.0005
##	240	0.3711	nan	0.1000	-0.0003
##	250	0.3595	nan	0.1000	-0.0009

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2308	nan	0.1000	0.0260
##	2	1.1694	nan	0.1000	0.0234
##	3	1.1225	nan	0.1000	0.0220
##	4	1.0892	nan	0.1000	0.0100
##	5	1.0521	nan	0.1000	0.0131
##	6	1.0198	nan	0.1000	0.0146
##	7	0.9846	nan	0.1000	0.0140
##	8	0.9651	nan	0.1000	0.0048
##	9	0.9467	nan	0.1000	0.0039
##	10	0.9300	nan	0.1000	0.0036
##	20	0.8009	nan	0.1000	-0.0007
##	40	0.6787	nan	0.1000	-0.0035
##	60	0.6091	nan	0.1000	-0.0035
##	80	0.5513	nan	0.1000	-0.0025

##	100	0.4998	nan	0.1000	-0.0014
##	120	0.4595	nan	0.1000	-0.0026
##	140	0.4263	nan	0.1000	-0.0023
##	160	0.3838	nan	0.1000	-0.0013
##	180	0.3533	nan	0.1000	-0.0011
##	200	0.3241	nan	0.1000	-0.0011
##	220	0.2977	nan	0.1000	-0.0018
##	240	0.2713	nan	0.1000	-0.0008
##	250	0.2633	nan	0.1000	-0.0013

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2265	nan	0.1000	0.0281
##	2	1.1641	nan	0.1000	0.0270
##	3	1.1155	nan	0.1000	0.0190
##	4	1.0735	nan	0.1000	0.0146
##	5	1.0409	nan	0.1000	0.0109
##	6	1.0101	nan	0.1000	0.0102
##	7	0.9787	nan	0.1000	0.0093
##	8	0.9526	nan	0.1000	0.0108
##	9	0.9320	nan	0.1000	0.0037
##	10	0.9108	nan	0.1000	0.0046
##	20	0.7748	nan	0.1000	0.0003
##	40	0.6461	nan	0.1000	-0.0013
##	60	0.5572	nan	0.1000	-0.0020
##	80	0.4852	nan	0.1000	-0.0017
##	100	0.4362	nan	0.1000	-0.0014
##	120	0.3845	nan	0.1000	-0.0021
##	140	0.3459	nan	0.1000	-0.0019
##	160	0.3076	nan	0.1000	-0.0022
##	180	0.2735	nan	0.1000	-0.0010
##	200	0.2427	nan	0.1000	-0.0009
##	220	0.2185	nan	0.1000	-0.0011
##	240	0.2002	nan	0.1000	-0.0014
##	250	0.1909	nan	0.1000	-0.0008

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2546	nan	0.1000	0.0177
##	2	1.2229	nan	0.1000	0.0119
##	3	1.1975	nan	0.1000	0.0114
##	4	1.1751	nan	0.1000	0.0084
##	5	1.1543	nan	0.1000	0.0065
##	6	1.1340	nan	0.1000	0.0053
##	7	1.1173	nan	0.1000	0.0052
##	8	1.1016	nan	0.1000	0.0063
##	9	1.0836	nan	0.1000	0.0057
##	10	1.0702	nan	0.1000	0.0047
##	20	0.9791	nan	0.1000	-0.0004
##	40	0.8904	nan	0.1000	0.0024
##	60	0.8482	nan	0.1000	-0.0011
##	80	0.8221	nan	0.1000	-0.0003
##	100	0.8038	nan	0.1000	-0.0011
##	120	0.7876	nan	0.1000	-0.0012
##	140	0.7746	nan	0.1000	-0.0007
##	160	0.7597	nan	0.1000	-0.0008

##	180	0.7481	nan	0.1000	-0.0012
##	200	0.7390	nan	0.1000	-0.0017
##	220	0.7325	nan	0.1000	-0.0008
##	240	0.7247	nan	0.1000	-0.0017
##	250	0.7187	nan	0.1000	-0.0016

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2480	nan	0.1000	0.0220
##	2	1.2087	nan	0.1000	0.0163
##	3	1.1717	nan	0.1000	0.0121
##	4	1.1473	nan	0.1000	0.0095
##	5	1.1223	nan	0.1000	0.0092
##	6	1.0940	nan	0.1000	0.0080
##	7	1.0740	nan	0.1000	0.0088
##	8	1.0523	nan	0.1000	0.0074
##	9	1.0342	nan	0.1000	0.0069
##	10	1.0160	nan	0.1000	0.0062
##	20	0.9102	nan	0.1000	0.0005
##	40	0.8113	nan	0.1000	-0.0020
##	60	0.7636	nan	0.1000	-0.0026
##	80	0.7276	nan	0.1000	-0.0025
##	100	0.6907	nan	0.1000	-0.0009
##	120	0.6621	nan	0.1000	-0.0031
##	140	0.6405	nan	0.1000	-0.0012
##	160	0.6186	nan	0.1000	-0.0011
##	180	0.5992	nan	0.1000	-0.0019
##	200	0.5799	nan	0.1000	-0.0017
##	220	0.5606	nan	0.1000	-0.0013
##	240	0.5411	nan	0.1000	-0.0019
##	250	0.5303	nan	0.1000	-0.0009

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2353	nan	0.1000	0.0257
##	2	1.1836	nan	0.1000	0.0221
##	3	1.1428	nan	0.1000	0.0117
##	4	1.1086	nan	0.1000	0.0131
##	5	1.0803	nan	0.1000	0.0124
##	6	1.0546	nan	0.1000	0.0085
##	7	1.0306	nan	0.1000	0.0094
##	8	1.0099	nan	0.1000	0.0057
##	9	0.9899	nan	0.1000	0.0081
##	10	0.9716	nan	0.1000	0.0037
##	20	0.8580	nan	0.1000	-0.0000
##	40	0.7555	nan	0.1000	-0.0003
##	60	0.6886	nan	0.1000	-0.0023
##	80	0.6431	nan	0.1000	-0.0030
##	100	0.6031	nan	0.1000	-0.0027
##	120	0.5606	nan	0.1000	-0.0004
##	140	0.5280	nan	0.1000	-0.0030
##	160	0.4904	nan	0.1000	-0.0026
##	180	0.4586	nan	0.1000	-0.0009
##	200	0.4362	nan	0.1000	-0.0022
##	220	0.4118	nan	0.1000	-0.0027
##	240	0.3900	nan	0.1000	-0.0009

```

##      250      0.3789      nan      0.1000     -0.0013
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2314      nan      0.1000     0.0263
##      2      1.1814      nan      0.1000     0.0217
##      3      1.1372      nan      0.1000     0.0212
##      4      1.1007      nan      0.1000     0.0152
##      5      1.0704      nan      0.1000     0.0124
##      6      1.0439      nan      0.1000     0.0104
##      7      1.0197      nan      0.1000     0.0061
##      8      0.9972      nan      0.1000     0.0060
##      9      0.9717      nan      0.1000     0.0089
##     10      0.9531      nan      0.1000     0.0065
##     20      0.8274      nan      0.1000     0.0010
##     40      0.7034      nan      0.1000    -0.0005
##     60      0.6351      nan      0.1000    -0.0037
##     80      0.5762      nan      0.1000    -0.0015
##    100      0.5232      nan      0.1000    -0.0021
##    120      0.4784      nan      0.1000    -0.0005
##    140      0.4358      nan      0.1000    -0.0008
##    160      0.3979      nan      0.1000    -0.0009
##    180      0.3645      nan      0.1000    -0.0007
##    200      0.3373      nan      0.1000    -0.0027
##    220      0.3094      nan      0.1000    -0.0013
##    240      0.2855      nan      0.1000    -0.0016
##    250      0.2763      nan      0.1000    -0.0014
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2295      nan      0.1000     0.0237
##      2      1.1696      nan      0.1000     0.0228
##      3      1.1221      nan      0.1000     0.0176
##      4      1.0864      nan      0.1000     0.0113
##      5      1.0473      nan      0.1000     0.0137
##      6      1.0108      nan      0.1000     0.0112
##      7      0.9849      nan      0.1000     0.0076
##      8      0.9564      nan      0.1000     0.0060
##      9      0.9388      nan      0.1000     0.0045
##     10      0.9170      nan      0.1000     0.0073
##     20      0.7945      nan      0.1000     0.0018
##     40      0.6645      nan      0.1000    -0.0053
##     60      0.5789      nan      0.1000    -0.0021
##     80      0.5142      nan      0.1000    -0.0026
##    100      0.4634      nan      0.1000    -0.0007
##    120      0.4191      nan      0.1000    -0.0015
##    140      0.3764      nan      0.1000    -0.0020
##    160      0.3377      nan      0.1000    -0.0009
##    180      0.3031      nan      0.1000    -0.0009
##    200      0.2792      nan      0.1000    -0.0023
##    220      0.2542      nan      0.1000    -0.0013
##    240      0.2302      nan      0.1000    -0.0014
##    250      0.2198      nan      0.1000    -0.0005
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2540      nan      0.1000     0.0182

```

##	2	1.2223	nan	0.1000	0.0127
##	3	1.1928	nan	0.1000	0.0119
##	4	1.1709	nan	0.1000	0.0110
##	5	1.1488	nan	0.1000	0.0091
##	6	1.1297	nan	0.1000	0.0080
##	7	1.1123	nan	0.1000	0.0056
##	8	1.0950	nan	0.1000	0.0080
##	9	1.0802	nan	0.1000	0.0050
##	10	1.0627	nan	0.1000	0.0051
##	20	0.9627	nan	0.1000	0.0021
##	40	0.8792	nan	0.1000	0.0005
##	60	0.8459	nan	0.1000	0.0004
##	80	0.8253	nan	0.1000	-0.0001
##	100	0.8094	nan	0.1000	-0.0007
##	120	0.7964	nan	0.1000	-0.0019
##	140	0.7798	nan	0.1000	0.0001
##	160	0.7684	nan	0.1000	-0.0014
##	180	0.7588	nan	0.1000	-0.0006
##	200	0.7459	nan	0.1000	-0.0010
##	220	0.7380	nan	0.1000	-0.0005
##	240	0.7300	nan	0.1000	-0.0018
##	250	0.7268	nan	0.1000	-0.0008

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2508	nan	0.1000	0.0148
##	2	1.2139	nan	0.1000	0.0172
##	3	1.1768	nan	0.1000	0.0169
##	4	1.1376	nan	0.1000	0.0164
##	5	1.1077	nan	0.1000	0.0122
##	6	1.0857	nan	0.1000	0.0101
##	7	1.0605	nan	0.1000	0.0098
##	8	1.0426	nan	0.1000	0.0067
##	9	1.0245	nan	0.1000	0.0082
##	10	1.0036	nan	0.1000	0.0088
##	20	0.8967	nan	0.1000	0.0011
##	40	0.8132	nan	0.1000	0.0007
##	60	0.7642	nan	0.1000	-0.0001
##	80	0.7364	nan	0.1000	-0.0002
##	100	0.7054	nan	0.1000	-0.0018
##	120	0.6793	nan	0.1000	-0.0011
##	140	0.6467	nan	0.1000	-0.0016
##	160	0.6228	nan	0.1000	-0.0017
##	180	0.6036	nan	0.1000	-0.0022
##	200	0.5881	nan	0.1000	-0.0024
##	220	0.5675	nan	0.1000	-0.0018
##	240	0.5520	nan	0.1000	-0.0012
##	250	0.5425	nan	0.1000	-0.0019

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2353	nan	0.1000	0.0211
##	2	1.1858	nan	0.1000	0.0198
##	3	1.1404	nan	0.1000	0.0173
##	4	1.1091	nan	0.1000	0.0130
##	5	1.0736	nan	0.1000	0.0155

##	6	1.0497	nan	0.1000	0.0092
##	7	1.0251	nan	0.1000	0.0126
##	8	1.0011	nan	0.1000	0.0073
##	9	0.9798	nan	0.1000	0.0046
##	10	0.9646	nan	0.1000	0.0025
##	20	0.8476	nan	0.1000	0.0011
##	40	0.7526	nan	0.1000	-0.0022
##	60	0.6946	nan	0.1000	-0.0020
##	80	0.6410	nan	0.1000	-0.0015
##	100	0.5985	nan	0.1000	-0.0028
##	120	0.5571	nan	0.1000	-0.0035
##	140	0.5228	nan	0.1000	-0.0017
##	160	0.4936	nan	0.1000	-0.0016
##	180	0.4657	nan	0.1000	-0.0020
##	200	0.4405	nan	0.1000	-0.0024
##	220	0.4114	nan	0.1000	-0.0020
##	240	0.3920	nan	0.1000	-0.0015
##	250	0.3826	nan	0.1000	-0.0022

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2290	nan	0.1000	0.0287
##	2	1.1749	nan	0.1000	0.0239
##	3	1.1271	nan	0.1000	0.0202
##	4	1.0855	nan	0.1000	0.0146
##	5	1.0570	nan	0.1000	0.0079
##	6	1.0246	nan	0.1000	0.0099
##	7	0.9962	nan	0.1000	0.0095
##	8	0.9691	nan	0.1000	0.0056
##	9	0.9526	nan	0.1000	0.0041
##	10	0.9359	nan	0.1000	0.0038
##	20	0.8057	nan	0.1000	0.0010
##	40	0.7103	nan	0.1000	-0.0009
##	60	0.6265	nan	0.1000	-0.0018
##	80	0.5671	nan	0.1000	-0.0012
##	100	0.5152	nan	0.1000	-0.0008
##	120	0.4763	nan	0.1000	-0.0024
##	140	0.4364	nan	0.1000	-0.0017
##	160	0.3992	nan	0.1000	-0.0007
##	180	0.3711	nan	0.1000	-0.0041
##	200	0.3440	nan	0.1000	-0.0017
##	220	0.3234	nan	0.1000	-0.0009
##	240	0.2987	nan	0.1000	-0.0007
##	250	0.2892	nan	0.1000	-0.0015

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2297	nan	0.1000	0.0229
##	2	1.1678	nan	0.1000	0.0230
##	3	1.1196	nan	0.1000	0.0214
##	4	1.0776	nan	0.1000	0.0138
##	5	1.0405	nan	0.1000	0.0113
##	6	1.0053	nan	0.1000	0.0130
##	7	0.9789	nan	0.1000	0.0089
##	8	0.9544	nan	0.1000	0.0066
##	9	0.9344	nan	0.1000	0.0050

##	10	0.9138	nan	0.1000	0.0032
##	20	0.7890	nan	0.1000	-0.0014
##	40	0.6581	nan	0.1000	-0.0010
##	60	0.5718	nan	0.1000	-0.0037
##	80	0.5102	nan	0.1000	-0.0032
##	100	0.4549	nan	0.1000	-0.0027
##	120	0.4036	nan	0.1000	-0.0031
##	140	0.3626	nan	0.1000	-0.0018
##	160	0.3244	nan	0.1000	-0.0002
##	180	0.2926	nan	0.1000	-0.0023
##	200	0.2630	nan	0.1000	-0.0013
##	220	0.2389	nan	0.1000	-0.0023
##	240	0.2170	nan	0.1000	-0.0011
##	250	0.2051	nan	0.1000	-0.0015

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2544	nan	0.1000	0.0165
##	2	1.2214	nan	0.1000	0.0125
##	3	1.1905	nan	0.1000	0.0137
##	4	1.1656	nan	0.1000	0.0095
##	5	1.1493	nan	0.1000	0.0045
##	6	1.1291	nan	0.1000	0.0091
##	7	1.1105	nan	0.1000	0.0075
##	8	1.0940	nan	0.1000	0.0066
##	9	1.0770	nan	0.1000	0.0061
##	10	1.0614	nan	0.1000	0.0057
##	20	0.9698	nan	0.1000	-0.0002
##	40	0.8754	nan	0.1000	-0.0007
##	60	0.8290	nan	0.1000	-0.0004
##	80	0.8023	nan	0.1000	0.0001
##	100	0.7809	nan	0.1000	-0.0016
##	120	0.7719	nan	0.1000	-0.0016
##	140	0.7586	nan	0.1000	-0.0006
##	160	0.7444	nan	0.1000	-0.0020
##	180	0.7329	nan	0.1000	-0.0018
##	200	0.7226	nan	0.1000	-0.0014
##	220	0.7154	nan	0.1000	0.0000
##	240	0.7129	nan	0.1000	-0.0015
##	250	0.7095	nan	0.1000	-0.0035

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2384	nan	0.1000	0.0211
##	2	1.2023	nan	0.1000	0.0158
##	3	1.1649	nan	0.1000	0.0159
##	4	1.1349	nan	0.1000	0.0115
##	5	1.1076	nan	0.1000	0.0132
##	6	1.0837	nan	0.1000	0.0075
##	7	1.0604	nan	0.1000	0.0080
##	8	1.0407	nan	0.1000	0.0073
##	9	1.0252	nan	0.1000	0.0029
##	10	1.0061	nan	0.1000	0.0083
##	20	0.9038	nan	0.1000	0.0031
##	40	0.8051	nan	0.1000	0.0007
##	60	0.7553	nan	0.1000	-0.0003

##	80	0.7202	nan	0.1000	-0.0022
##	100	0.6900	nan	0.1000	-0.0009
##	120	0.6639	nan	0.1000	-0.0037
##	140	0.6399	nan	0.1000	-0.0012
##	160	0.6192	nan	0.1000	-0.0011
##	180	0.5974	nan	0.1000	-0.0016
##	200	0.5762	nan	0.1000	-0.0026
##	220	0.5569	nan	0.1000	0.0001
##	240	0.5410	nan	0.1000	-0.0019
##	250	0.5320	nan	0.1000	-0.0012

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2361	nan	0.1000	0.0200
##	2	1.1912	nan	0.1000	0.0176
##	3	1.1571	nan	0.1000	0.0106
##	4	1.1078	nan	0.1000	0.0209
##	5	1.0736	nan	0.1000	0.0166
##	6	1.0423	nan	0.1000	0.0137
##	7	1.0179	nan	0.1000	0.0102
##	8	0.9970	nan	0.1000	0.0070
##	9	0.9800	nan	0.1000	0.0052
##	10	0.9671	nan	0.1000	0.0031
##	20	0.8445	nan	0.1000	0.0028
##	40	0.7381	nan	0.1000	-0.0021
##	60	0.6803	nan	0.1000	-0.0010
##	80	0.6374	nan	0.1000	-0.0016
##	100	0.5964	nan	0.1000	-0.0023
##	120	0.5505	nan	0.1000	-0.0012
##	140	0.5176	nan	0.1000	-0.0014
##	160	0.4869	nan	0.1000	-0.0023
##	180	0.4586	nan	0.1000	-0.0011
##	200	0.4358	nan	0.1000	-0.0024
##	220	0.4122	nan	0.1000	-0.0003
##	240	0.3889	nan	0.1000	-0.0012
##	250	0.3794	nan	0.1000	-0.0025

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2294	nan	0.1000	0.0324
##	2	1.1764	nan	0.1000	0.0173
##	3	1.1213	nan	0.1000	0.0261
##	4	1.0822	nan	0.1000	0.0158
##	5	1.0474	nan	0.1000	0.0116
##	6	1.0213	nan	0.1000	0.0079
##	7	0.9951	nan	0.1000	0.0078
##	8	0.9731	nan	0.1000	0.0069
##	9	0.9514	nan	0.1000	0.0061
##	10	0.9297	nan	0.1000	0.0085
##	20	0.8147	nan	0.1000	-0.0031
##	40	0.6916	nan	0.1000	-0.0028
##	60	0.6157	nan	0.1000	-0.0032
##	80	0.5556	nan	0.1000	-0.0039
##	100	0.5082	nan	0.1000	-0.0013
##	120	0.4660	nan	0.1000	-0.0017
##	140	0.4330	nan	0.1000	-0.0022

##	160	0.3967	nan	0.1000	-0.0011
##	180	0.3718	nan	0.1000	-0.0018
##	200	0.3442	nan	0.1000	-0.0032
##	220	0.3149	nan	0.1000	-0.0009
##	240	0.2914	nan	0.1000	-0.0030
##	250	0.2770	nan	0.1000	-0.0006

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2273	nan	0.1000	0.0279
##	2	1.1693	nan	0.1000	0.0240
##	3	1.1153	nan	0.1000	0.0219
##	4	1.0750	nan	0.1000	0.0140
##	5	1.0404	nan	0.1000	0.0101
##	6	1.0080	nan	0.1000	0.0125
##	7	0.9845	nan	0.1000	0.0028
##	8	0.9606	nan	0.1000	0.0066
##	9	0.9371	nan	0.1000	0.0081
##	10	0.9116	nan	0.1000	0.0080
##	20	0.7791	nan	0.1000	0.0002
##	40	0.6454	nan	0.1000	-0.0030
##	60	0.5665	nan	0.1000	-0.0013
##	80	0.5033	nan	0.1000	-0.0009
##	100	0.4438	nan	0.1000	-0.0025
##	120	0.3966	nan	0.1000	-0.0021
##	140	0.3508	nan	0.1000	-0.0010
##	160	0.3167	nan	0.1000	-0.0013
##	180	0.2861	nan	0.1000	-0.0016
##	200	0.2546	nan	0.1000	-0.0012
##	220	0.2291	nan	0.1000	-0.0013
##	240	0.2076	nan	0.1000	-0.0012
##	250	0.1964	nan	0.1000	-0.0008

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2532	nan	0.1000	0.0175
##	2	1.2182	nan	0.1000	0.0163
##	3	1.1950	nan	0.1000	0.0112
##	4	1.1691	nan	0.1000	0.0100
##	5	1.1450	nan	0.1000	0.0090
##	6	1.1225	nan	0.1000	0.0069
##	7	1.1068	nan	0.1000	0.0057
##	8	1.0899	nan	0.1000	0.0059
##	9	1.0746	nan	0.1000	0.0063
##	10	1.0609	nan	0.1000	0.0060
##	20	0.9671	nan	0.1000	0.0005
##	40	0.8838	nan	0.1000	-0.0016
##	60	0.8409	nan	0.1000	-0.0005
##	80	0.8166	nan	0.1000	-0.0001
##	100	0.7978	nan	0.1000	-0.0007
##	120	0.7820	nan	0.1000	-0.0000
##	140	0.7714	nan	0.1000	-0.0011
##	160	0.7601	nan	0.1000	-0.0005
##	180	0.7526	nan	0.1000	-0.0007
##	200	0.7446	nan	0.1000	-0.0033
##	220	0.7378	nan	0.1000	-0.0030

```

##      240      0.7312      nan      0.1000     -0.0005
##      250      0.7280      nan      0.1000     -0.0011
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2469      nan      0.1000     0.0211
##      2      1.2005      nan      0.1000     0.0207
##      3      1.1636      nan      0.1000     0.0187
##      4      1.1318      nan      0.1000     0.0125
##      5      1.1066      nan      0.1000     0.0111
##      6      1.0813      nan      0.1000     0.0113
##      7      1.0618      nan      0.1000     0.0051
##      8      1.0424      nan      0.1000     0.0077
##      9      1.0186      nan      0.1000     0.0099
##     10      1.0023      nan      0.1000     0.0065
##     20      0.8908      nan      0.1000     0.0021
##     40      0.8009      nan      0.1000    -0.0013
##     60      0.7611      nan      0.1000    -0.0004
##     80      0.7190      nan      0.1000    -0.0018
##    100      0.6929      nan      0.1000    -0.0017
##    120      0.6647      nan      0.1000    -0.0019
##    140      0.6355      nan      0.1000    -0.0007
##    160      0.6110      nan      0.1000    -0.0022
##    180      0.5903      nan      0.1000    -0.0019
##    200      0.5638      nan      0.1000    -0.0013
##    220      0.5387      nan      0.1000    -0.0027
##    240      0.5212      nan      0.1000    -0.0009
##    250      0.5115      nan      0.1000    -0.0019
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2284      nan      0.1000     0.0262
##      2      1.1788      nan      0.1000     0.0197
##      3      1.1394      nan      0.1000     0.0185
##      4      1.1084      nan      0.1000     0.0127
##      5      1.0728      nan      0.1000     0.0158
##      6      1.0489      nan      0.1000     0.0063
##      7      1.0251      nan      0.1000     0.0064
##      8      1.0018      nan      0.1000     0.0081
##      9      0.9807      nan      0.1000     0.0077
##     10      0.9675      nan      0.1000     0.0023
##     20      0.8507      nan      0.1000     0.0002
##     40      0.7563      nan      0.1000    -0.0018
##     60      0.6989      nan      0.1000    -0.0011
##     80      0.6497      nan      0.1000    -0.0023
##    100      0.6115      nan      0.1000    -0.0015
##    120      0.5750      nan      0.1000    -0.0058
##    140      0.5432      nan      0.1000    -0.0037
##    160      0.5054      nan      0.1000    -0.0009
##    180      0.4740      nan      0.1000     0.0001
##    200      0.4379      nan      0.1000    -0.0009
##    220      0.4114      nan      0.1000    -0.0021
##    240      0.3882      nan      0.1000    -0.0008
##    250      0.3785      nan      0.1000    -0.0011
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve

```


##	1	1.2296	nan	0.1000	0.0278
##	2	1.1828	nan	0.1000	0.0173
##	3	1.1319	nan	0.1000	0.0223
##	4	1.0929	nan	0.1000	0.0166
##	5	1.0623	nan	0.1000	0.0105
##	6	1.0304	nan	0.1000	0.0093
##	7	1.0037	nan	0.1000	0.0081
##	8	0.9761	nan	0.1000	0.0094
##	9	0.9526	nan	0.1000	0.0059
##	10	0.9336	nan	0.1000	0.0050
##	20	0.8106	nan	0.1000	-0.0026
##	40	0.6936	nan	0.1000	-0.0034
##	60	0.6220	nan	0.1000	-0.0032
##	80	0.5691	nan	0.1000	-0.0010
##	100	0.5159	nan	0.1000	-0.0007
##	120	0.4688	nan	0.1000	-0.0032
##	140	0.4330	nan	0.1000	-0.0029
##	160	0.3908	nan	0.1000	-0.0004
##	180	0.3573	nan	0.1000	-0.0023
##	200	0.3309	nan	0.1000	-0.0034
##	220	0.3047	nan	0.1000	-0.0014
##	240	0.2814	nan	0.1000	-0.0007
##	250	0.2703	nan	0.1000	-0.0015

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2278	nan	0.1000	0.0250
##	2	1.1712	nan	0.1000	0.0232
##	3	1.1250	nan	0.1000	0.0199
##	4	1.0789	nan	0.1000	0.0164
##	5	1.0413	nan	0.1000	0.0097
##	6	1.0119	nan	0.1000	0.0106
##	7	0.9841	nan	0.1000	0.0087
##	8	0.9597	nan	0.1000	0.0068
##	9	0.9373	nan	0.1000	0.0061
##	10	0.9217	nan	0.1000	0.0009
##	20	0.8024	nan	0.1000	-0.0038
##	40	0.6693	nan	0.1000	-0.0031
##	60	0.5897	nan	0.1000	-0.0031
##	80	0.5223	nan	0.1000	-0.0037
##	100	0.4570	nan	0.1000	-0.0017
##	120	0.4154	nan	0.1000	-0.0017
##	140	0.3667	nan	0.1000	-0.0017
##	160	0.3241	nan	0.1000	-0.0033
##	180	0.2905	nan	0.1000	-0.0012
##	200	0.2629	nan	0.1000	-0.0014
##	220	0.2403	nan	0.1000	-0.0014
##	240	0.2182	nan	0.1000	-0.0015
##	250	0.2071	nan	0.1000	-0.0009

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2589	nan	0.1000	0.0158
##	2	1.2238	nan	0.1000	0.0186
##	3	1.1945	nan	0.1000	0.0127
##	4	1.1734	nan	0.1000	0.0089

##	5	1.1552	nan	0.1000	0.0087
##	6	1.1344	nan	0.1000	0.0077
##	7	1.1143	nan	0.1000	0.0076
##	8	1.0998	nan	0.1000	0.0036
##	9	1.0854	nan	0.1000	0.0053
##	10	1.0707	nan	0.1000	0.0069
##	20	0.9679	nan	0.1000	0.0003
##	40	0.8837	nan	0.1000	-0.0021
##	60	0.8419	nan	0.1000	-0.0020
##	80	0.8222	nan	0.1000	-0.0005
##	100	0.7972	nan	0.1000	-0.0005
##	120	0.7760	nan	0.1000	-0.0009
##	140	0.7638	nan	0.1000	-0.0009
##	160	0.7524	nan	0.1000	-0.0009
##	180	0.7369	nan	0.1000	-0.0014
##	200	0.7290	nan	0.1000	-0.0010
##	220	0.7196	nan	0.1000	-0.0006
##	240	0.7114	nan	0.1000	-0.0014
##	250	0.7062	nan	0.1000	-0.0001

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2507	nan	0.1000	0.0157
##	2	1.2085	nan	0.1000	0.0190
##	3	1.1672	nan	0.1000	0.0190
##	4	1.1375	nan	0.1000	0.0112
##	5	1.1066	nan	0.1000	0.0096
##	6	1.0818	nan	0.1000	0.0113
##	7	1.0574	nan	0.1000	0.0104
##	8	1.0360	nan	0.1000	0.0076
##	9	1.0151	nan	0.1000	0.0081
##	10	0.9984	nan	0.1000	0.0053
##	20	0.9023	nan	0.1000	-0.0004
##	40	0.8060	nan	0.1000	-0.0023
##	60	0.7536	nan	0.1000	-0.0015
##	80	0.7161	nan	0.1000	-0.0018
##	100	0.6828	nan	0.1000	-0.0012
##	120	0.6540	nan	0.1000	-0.0022
##	140	0.6246	nan	0.1000	-0.0017
##	160	0.5962	nan	0.1000	-0.0009
##	180	0.5710	nan	0.1000	-0.0017
##	200	0.5517	nan	0.1000	-0.0021
##	220	0.5302	nan	0.1000	-0.0022
##	240	0.5180	nan	0.1000	-0.0025
##	250	0.5085	nan	0.1000	-0.0010

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2327	nan	0.1000	0.0257
##	2	1.1870	nan	0.1000	0.0189
##	3	1.1465	nan	0.1000	0.0175
##	4	1.1067	nan	0.1000	0.0147
##	5	1.0757	nan	0.1000	0.0147
##	6	1.0489	nan	0.1000	0.0126
##	7	1.0228	nan	0.1000	0.0098
##	8	1.0011	nan	0.1000	0.0085

##	9	0.9849	nan	0.1000	0.0048
##	10	0.9683	nan	0.1000	0.0025
##	20	0.8463	nan	0.1000	0.0009
##	40	0.7488	nan	0.1000	-0.0030
##	60	0.6875	nan	0.1000	-0.0022
##	80	0.6305	nan	0.1000	-0.0026
##	100	0.5828	nan	0.1000	-0.0027
##	120	0.5417	nan	0.1000	-0.0013
##	140	0.5109	nan	0.1000	-0.0017
##	160	0.4830	nan	0.1000	-0.0021
##	180	0.4541	nan	0.1000	-0.0013
##	200	0.4247	nan	0.1000	-0.0021
##	220	0.3991	nan	0.1000	-0.0017
##	240	0.3745	nan	0.1000	-0.0025
##	250	0.3647	nan	0.1000	-0.0006

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2265	nan	0.1000	0.0287
##	2	1.1721	nan	0.1000	0.0221
##	3	1.1234	nan	0.1000	0.0197
##	4	1.0873	nan	0.1000	0.0137
##	5	1.0523	nan	0.1000	0.0137
##	6	1.0228	nan	0.1000	0.0117
##	7	0.9965	nan	0.1000	0.0103
##	8	0.9755	nan	0.1000	0.0073
##	9	0.9571	nan	0.1000	0.0038
##	10	0.9427	nan	0.1000	0.0003
##	20	0.8138	nan	0.1000	0.0005
##	40	0.6967	nan	0.1000	0.0008
##	60	0.6191	nan	0.1000	-0.0016
##	80	0.5575	nan	0.1000	-0.0009
##	100	0.4954	nan	0.1000	-0.0015
##	120	0.4532	nan	0.1000	-0.0027
##	140	0.4133	nan	0.1000	-0.0022
##	160	0.3854	nan	0.1000	-0.0024
##	180	0.3536	nan	0.1000	-0.0018
##	200	0.3285	nan	0.1000	-0.0011
##	220	0.3019	nan	0.1000	-0.0010
##	240	0.2810	nan	0.1000	-0.0014
##	250	0.2715	nan	0.1000	-0.0020

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2211	nan	0.1000	0.0315
##	2	1.1682	nan	0.1000	0.0241
##	3	1.1199	nan	0.1000	0.0152
##	4	1.0770	nan	0.1000	0.0167
##	5	1.0400	nan	0.1000	0.0112
##	6	1.0107	nan	0.1000	0.0110
##	7	0.9806	nan	0.1000	0.0075
##	8	0.9543	nan	0.1000	0.0085
##	9	0.9286	nan	0.1000	0.0088
##	10	0.9092	nan	0.1000	0.0053
##	20	0.7729	nan	0.1000	0.0005
##	40	0.6360	nan	0.1000	-0.0022

##	60	0.5532	nan	0.1000	-0.0014
##	80	0.4829	nan	0.1000	-0.0021
##	100	0.4317	nan	0.1000	-0.0011
##	120	0.3844	nan	0.1000	-0.0018
##	140	0.3499	nan	0.1000	-0.0015
##	160	0.3135	nan	0.1000	-0.0009
##	180	0.2833	nan	0.1000	-0.0007
##	200	0.2581	nan	0.1000	-0.0006
##	220	0.2299	nan	0.1000	-0.0012
##	240	0.2060	nan	0.1000	-0.0012
##	250	0.1939	nan	0.1000	-0.0008

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2593	nan	0.1000	0.0190
##	2	1.2276	nan	0.1000	0.0152
##	3	1.2004	nan	0.1000	0.0116
##	4	1.1742	nan	0.1000	0.0098
##	5	1.1539	nan	0.1000	0.0065
##	6	1.1376	nan	0.1000	0.0055
##	7	1.1196	nan	0.1000	0.0070
##	8	1.1064	nan	0.1000	0.0060
##	9	1.0915	nan	0.1000	0.0064
##	10	1.0753	nan	0.1000	0.0033
##	20	0.9743	nan	0.1000	0.0024
##	40	0.8913	nan	0.1000	-0.0009
##	60	0.8462	nan	0.1000	-0.0004
##	80	0.8145	nan	0.1000	-0.0000
##	100	0.7865	nan	0.1000	-0.0010
##	120	0.7678	nan	0.1000	-0.0022
##	140	0.7566	nan	0.1000	-0.0010
##	160	0.7449	nan	0.1000	-0.0012
##	180	0.7346	nan	0.1000	-0.0017
##	200	0.7257	nan	0.1000	-0.0010
##	220	0.7166	nan	0.1000	-0.0017
##	240	0.7090	nan	0.1000	-0.0007
##	250	0.7050	nan	0.1000	-0.0013

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2453	nan	0.1000	0.0203
##	2	1.1980	nan	0.1000	0.0237
##	3	1.1606	nan	0.1000	0.0160
##	4	1.1325	nan	0.1000	0.0140
##	5	1.1042	nan	0.1000	0.0114
##	6	1.0757	nan	0.1000	0.0102
##	7	1.0536	nan	0.1000	0.0089
##	8	1.0345	nan	0.1000	0.0061
##	9	1.0185	nan	0.1000	0.0054
##	10	1.0006	nan	0.1000	0.0066
##	20	0.8987	nan	0.1000	0.0017
##	40	0.8044	nan	0.1000	0.0002
##	60	0.7499	nan	0.1000	-0.0010
##	80	0.7154	nan	0.1000	-0.0017
##	100	0.6837	nan	0.1000	-0.0015
##	120	0.6587	nan	0.1000	-0.0023

##	140	0.6356	nan	0.1000	-0.0019
##	160	0.6175	nan	0.1000	-0.0018
##	180	0.5946	nan	0.1000	0.0000
##	200	0.5750	nan	0.1000	-0.0022
##	220	0.5541	nan	0.1000	-0.0017
##	240	0.5355	nan	0.1000	-0.0009
##	250	0.5276	nan	0.1000	-0.0013

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2399	nan	0.1000	0.0188
##	2	1.1898	nan	0.1000	0.0218
##	3	1.1500	nan	0.1000	0.0161
##	4	1.1172	nan	0.1000	0.0116
##	5	1.0874	nan	0.1000	0.0105
##	6	1.0639	nan	0.1000	0.0091
##	7	1.0373	nan	0.1000	0.0117
##	8	1.0111	nan	0.1000	0.0078
##	9	0.9880	nan	0.1000	0.0078
##	10	0.9703	nan	0.1000	0.0053
##	20	0.8511	nan	0.1000	-0.0020
##	40	0.7427	nan	0.1000	-0.0016
##	60	0.6809	nan	0.1000	-0.0009
##	80	0.6370	nan	0.1000	-0.0030
##	100	0.5999	nan	0.1000	-0.0022
##	120	0.5654	nan	0.1000	-0.0019
##	140	0.5241	nan	0.1000	-0.0020
##	160	0.4982	nan	0.1000	-0.0017
##	180	0.4720	nan	0.1000	-0.0019
##	200	0.4507	nan	0.1000	-0.0026
##	220	0.4216	nan	0.1000	-0.0004
##	240	0.3991	nan	0.1000	-0.0026
##	250	0.3878	nan	0.1000	-0.0003

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2298	nan	0.1000	0.0259
##	2	1.1809	nan	0.1000	0.0207
##	3	1.1363	nan	0.1000	0.0170
##	4	1.0963	nan	0.1000	0.0173
##	5	1.0621	nan	0.1000	0.0105
##	6	1.0328	nan	0.1000	0.0106
##	7	1.0030	nan	0.1000	0.0096
##	8	0.9787	nan	0.1000	0.0076
##	9	0.9594	nan	0.1000	0.0046
##	10	0.9381	nan	0.1000	0.0077
##	20	0.8202	nan	0.1000	-0.0018
##	40	0.6955	nan	0.1000	-0.0041
##	60	0.6207	nan	0.1000	-0.0023
##	80	0.5609	nan	0.1000	-0.0017
##	100	0.5126	nan	0.1000	-0.0009
##	120	0.4734	nan	0.1000	-0.0028
##	140	0.4312	nan	0.1000	-0.0024
##	160	0.3929	nan	0.1000	-0.0014
##	180	0.3612	nan	0.1000	-0.0014
##	200	0.3351	nan	0.1000	-0.0025

```

##      220      0.3084      nan      0.1000     -0.0012
##      240      0.2855      nan      0.1000     -0.0017
##      250      0.2760      nan      0.1000     -0.0026
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2336      nan      0.1000     0.0232
##      2      1.1695      nan      0.1000     0.0306
##      3      1.1218      nan      0.1000     0.0181
##      4      1.0814      nan      0.1000     0.0147
##      5      1.0444      nan      0.1000     0.0117
##      6      1.0100      nan      0.1000     0.0125
##      7      0.9789      nan      0.1000     0.0137
##      8      0.9584      nan      0.1000     0.0054
##      9      0.9393      nan      0.1000     0.0037
##     10      0.9141      nan      0.1000     0.0083
##     20      0.7796      nan      0.1000    -0.0020
##     40      0.6516      nan      0.1000    -0.0007
##     60      0.5653      nan      0.1000    -0.0010
##     80      0.5071      nan      0.1000    -0.0027
##    100      0.4521      nan      0.1000    -0.0017
##    120      0.4027      nan      0.1000    -0.0019
##    140      0.3633      nan      0.1000    -0.0032
##    160      0.3213      nan      0.1000    -0.0011
##    180      0.2924      nan      0.1000    -0.0019
##    200      0.2671      nan      0.1000    -0.0014
##    220      0.2442      nan      0.1000    -0.0008
##    240      0.2192      nan      0.1000    -0.0007
##    250      0.2090      nan      0.1000    -0.0007
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2488      nan      0.1000     0.0163
##      2      1.2180      nan      0.1000     0.0130
##      3      1.1878      nan      0.1000     0.0106
##      4      1.1624      nan      0.1000     0.0090
##      5      1.1399      nan      0.1000     0.0097
##      6      1.1216      nan      0.1000     0.0057
##      7      1.1062      nan      0.1000     0.0048
##      8      1.0913      nan      0.1000     0.0048
##      9      1.0810      nan      0.1000     0.0029
##     10      1.0706      nan      0.1000     0.0023
##     20      0.9823      nan      0.1000    -0.0002
##     40      0.9014      nan      0.1000    -0.0016
##     60      0.8612      nan      0.1000    -0.0004
##     80      0.8368      nan      0.1000    -0.0015
##    100      0.8178      nan      0.1000    -0.0012
##    120      0.7984      nan      0.1000    -0.0006
##    140      0.7820      nan      0.1000    -0.0008
##    160      0.7691      nan      0.1000     0.0005
##    180      0.7569      nan      0.1000    -0.0006
##    200      0.7464      nan      0.1000    -0.0012
##    220      0.7384      nan      0.1000    -0.0024
##    240      0.7321      nan      0.1000    -0.0014
##    250      0.7261      nan      0.1000    -0.0004
##

```

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2437	nan	0.1000	0.0231
##	2	1.2032	nan	0.1000	0.0175
##	3	1.1664	nan	0.1000	0.0147
##	4	1.1334	nan	0.1000	0.0089
##	5	1.1056	nan	0.1000	0.0120
##	6	1.0888	nan	0.1000	0.0054
##	7	1.0649	nan	0.1000	0.0078
##	8	1.0485	nan	0.1000	0.0070
##	9	1.0351	nan	0.1000	0.0046
##	10	1.0190	nan	0.1000	0.0047
##	20	0.9149	nan	0.1000	0.0001
##	40	0.8258	nan	0.1000	-0.0025
##	60	0.7850	nan	0.1000	-0.0017
##	80	0.7460	nan	0.1000	-0.0020
##	100	0.7086	nan	0.1000	-0.0014
##	120	0.6847	nan	0.1000	-0.0016
##	140	0.6588	nan	0.1000	-0.0009
##	160	0.6388	nan	0.1000	-0.0028
##	180	0.6182	nan	0.1000	-0.0024
##	200	0.5912	nan	0.1000	-0.0024
##	220	0.5764	nan	0.1000	-0.0032
##	240	0.5533	nan	0.1000	-0.0021
##	250	0.5430	nan	0.1000	-0.0017

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2440	nan	0.1000	0.0234
##	2	1.1947	nan	0.1000	0.0193
##	3	1.1491	nan	0.1000	0.0172
##	4	1.1123	nan	0.1000	0.0156
##	5	1.0826	nan	0.1000	0.0108
##	6	1.0576	nan	0.1000	0.0075
##	7	1.0307	nan	0.1000	0.0074
##	8	1.0081	nan	0.1000	0.0059
##	9	0.9878	nan	0.1000	0.0067
##	10	0.9740	nan	0.1000	0.0045
##	20	0.8569	nan	0.1000	0.0003
##	40	0.7519	nan	0.1000	-0.0010
##	60	0.6896	nan	0.1000	-0.0013
##	80	0.6365	nan	0.1000	-0.0020
##	100	0.5942	nan	0.1000	-0.0021
##	120	0.5589	nan	0.1000	-0.0022
##	140	0.5264	nan	0.1000	-0.0020
##	160	0.5010	nan	0.1000	-0.0013
##	180	0.4776	nan	0.1000	-0.0025
##	200	0.4464	nan	0.1000	-0.0025
##	220	0.4246	nan	0.1000	-0.0009
##	240	0.4010	nan	0.1000	-0.0027
##	250	0.3887	nan	0.1000	-0.0014

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2331	nan	0.1000	0.0269
##	2	1.1829	nan	0.1000	0.0172
##	3	1.1319	nan	0.1000	0.0185

##	4	1.0978	nan	0.1000	0.0099
##	5	1.0699	nan	0.1000	0.0098
##	6	1.0358	nan	0.1000	0.0146
##	7	1.0074	nan	0.1000	0.0082
##	8	0.9862	nan	0.1000	0.0059
##	9	0.9674	nan	0.1000	0.0040
##	10	0.9515	nan	0.1000	0.0044
##	20	0.8267	nan	0.1000	0.0008
##	40	0.6998	nan	0.1000	-0.0017
##	60	0.6328	nan	0.1000	-0.0020
##	80	0.5702	nan	0.1000	-0.0018
##	100	0.5237	nan	0.1000	-0.0010
##	120	0.4803	nan	0.1000	-0.0017
##	140	0.4406	nan	0.1000	-0.0006
##	160	0.4098	nan	0.1000	-0.0025
##	180	0.3769	nan	0.1000	-0.0013
##	200	0.3453	nan	0.1000	-0.0030
##	220	0.3185	nan	0.1000	-0.0010
##	240	0.2913	nan	0.1000	-0.0003
##	250	0.2813	nan	0.1000	-0.0020

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2281	nan	0.1000	0.0275
##	2	1.1735	nan	0.1000	0.0244
##	3	1.1311	nan	0.1000	0.0160
##	4	1.0916	nan	0.1000	0.0132
##	5	1.0535	nan	0.1000	0.0150
##	6	1.0215	nan	0.1000	0.0094
##	7	0.9994	nan	0.1000	0.0043
##	8	0.9746	nan	0.1000	0.0076
##	9	0.9520	nan	0.1000	0.0080
##	10	0.9301	nan	0.1000	0.0054
##	20	0.7985	nan	0.1000	0.0010
##	40	0.6711	nan	0.1000	-0.0022
##	60	0.5877	nan	0.1000	-0.0025
##	80	0.5208	nan	0.1000	-0.0017
##	100	0.4560	nan	0.1000	-0.0016
##	120	0.4091	nan	0.1000	-0.0028
##	140	0.3669	nan	0.1000	-0.0017
##	160	0.3287	nan	0.1000	-0.0004
##	180	0.2975	nan	0.1000	-0.0009
##	200	0.2689	nan	0.1000	-0.0013
##	220	0.2446	nan	0.1000	-0.0010
##	240	0.2238	nan	0.1000	-0.0013
##	250	0.2147	nan	0.1000	-0.0014

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2551	nan	0.1000	0.0201
##	2	1.2279	nan	0.1000	0.0144
##	3	1.2001	nan	0.1000	0.0120
##	4	1.1703	nan	0.1000	0.0122
##	5	1.1506	nan	0.1000	0.0096
##	6	1.1312	nan	0.1000	0.0078
##	7	1.1113	nan	0.1000	0.0064

##	8	1.0958	nan	0.1000	0.0061
##	9	1.0831	nan	0.1000	0.0047
##	10	1.0708	nan	0.1000	0.0049
##	20	0.9718	nan	0.1000	0.0034
##	40	0.8808	nan	0.1000	0.0011
##	60	0.8377	nan	0.1000	-0.0001
##	80	0.8087	nan	0.1000	-0.0014
##	100	0.7883	nan	0.1000	-0.0011
##	120	0.7735	nan	0.1000	-0.0027
##	140	0.7646	nan	0.1000	-0.0009
##	160	0.7520	nan	0.1000	-0.0017
##	180	0.7431	nan	0.1000	-0.0010
##	200	0.7356	nan	0.1000	-0.0017
##	220	0.7305	nan	0.1000	-0.0021
##	240	0.7240	nan	0.1000	-0.0019
##	250	0.7190	nan	0.1000	-0.0011

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2462	nan	0.1000	0.0242
##	2	1.1961	nan	0.1000	0.0187
##	3	1.1561	nan	0.1000	0.0150
##	4	1.1272	nan	0.1000	0.0096
##	5	1.0954	nan	0.1000	0.0131
##	6	1.0707	nan	0.1000	0.0100
##	7	1.0473	nan	0.1000	0.0088
##	8	1.0264	nan	0.1000	0.0084
##	9	1.0107	nan	0.1000	0.0071
##	10	0.9917	nan	0.1000	0.0032
##	20	0.8855	nan	0.1000	0.0010
##	40	0.7994	nan	0.1000	-0.0005
##	60	0.7495	nan	0.1000	-0.0020
##	80	0.7103	nan	0.1000	-0.0022
##	100	0.6812	nan	0.1000	-0.0020
##	120	0.6526	nan	0.1000	-0.0015
##	140	0.6250	nan	0.1000	-0.0025
##	160	0.6069	nan	0.1000	-0.0016
##	180	0.5795	nan	0.1000	-0.0012
##	200	0.5627	nan	0.1000	-0.0004
##	220	0.5458	nan	0.1000	-0.0016
##	240	0.5281	nan	0.1000	-0.0035
##	250	0.5204	nan	0.1000	-0.0016

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2378	nan	0.1000	0.0214
##	2	1.1835	nan	0.1000	0.0228
##	3	1.1409	nan	0.1000	0.0173
##	4	1.1091	nan	0.1000	0.0119
##	5	1.0747	nan	0.1000	0.0121
##	6	1.0449	nan	0.1000	0.0120
##	7	1.0203	nan	0.1000	0.0103
##	8	0.9990	nan	0.1000	0.0071
##	9	0.9788	nan	0.1000	0.0050
##	10	0.9586	nan	0.1000	0.0063
##	20	0.8486	nan	0.1000	0.0022

##	40	0.7486	nan	0.1000	0.0000
##	60	0.7020	nan	0.1000	-0.0014
##	80	0.6550	nan	0.1000	-0.0020
##	100	0.6210	nan	0.1000	-0.0014
##	120	0.5772	nan	0.1000	-0.0008
##	140	0.5398	nan	0.1000	-0.0017
##	160	0.5069	nan	0.1000	-0.0014
##	180	0.4863	nan	0.1000	-0.0013
##	200	0.4548	nan	0.1000	-0.0023
##	220	0.4290	nan	0.1000	-0.0032
##	240	0.4062	nan	0.1000	-0.0021
##	250	0.3959	nan	0.1000	-0.0021

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2329	nan	0.1000	0.0264
##	2	1.1790	nan	0.1000	0.0196
##	3	1.1308	nan	0.1000	0.0223
##	4	1.0904	nan	0.1000	0.0173
##	5	1.0552	nan	0.1000	0.0097
##	6	1.0245	nan	0.1000	0.0121
##	7	0.9997	nan	0.1000	0.0068
##	8	0.9707	nan	0.1000	0.0088
##	9	0.9523	nan	0.1000	0.0044
##	10	0.9329	nan	0.1000	0.0045
##	20	0.8143	nan	0.1000	0.0005
##	40	0.7024	nan	0.1000	-0.0030
##	60	0.6279	nan	0.1000	-0.0017
##	80	0.5720	nan	0.1000	-0.0033
##	100	0.5237	nan	0.1000	-0.0018
##	120	0.4767	nan	0.1000	-0.0025
##	140	0.4386	nan	0.1000	-0.0003
##	160	0.4004	nan	0.1000	-0.0028
##	180	0.3709	nan	0.1000	-0.0011
##	200	0.3443	nan	0.1000	-0.0018
##	220	0.3169	nan	0.1000	-0.0006
##	240	0.2940	nan	0.1000	-0.0019
##	250	0.2831	nan	0.1000	-0.0013

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2213	nan	0.1000	0.0319
##	2	1.1624	nan	0.1000	0.0232
##	3	1.1107	nan	0.1000	0.0193
##	4	1.0682	nan	0.1000	0.0195
##	5	1.0369	nan	0.1000	0.0080
##	6	1.0025	nan	0.1000	0.0118
##	7	0.9742	nan	0.1000	0.0113
##	8	0.9547	nan	0.1000	0.0037
##	9	0.9357	nan	0.1000	0.0066
##	10	0.9135	nan	0.1000	0.0044
##	20	0.7821	nan	0.1000	-0.0003
##	40	0.6487	nan	0.1000	-0.0012
##	60	0.5691	nan	0.1000	-0.0020
##	80	0.5038	nan	0.1000	-0.0026
##	100	0.4459	nan	0.1000	-0.0019

##	120	0.4024	nan	0.1000	-0.0033
##	140	0.3633	nan	0.1000	-0.0007
##	160	0.3260	nan	0.1000	-0.0001
##	180	0.2953	nan	0.1000	-0.0012
##	200	0.2707	nan	0.1000	-0.0009
##	220	0.2458	nan	0.1000	-0.0009
##	240	0.2215	nan	0.1000	-0.0007
##	250	0.2083	nan	0.1000	0.0001

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2525	nan	0.1000	0.0207
##	2	1.2196	nan	0.1000	0.0165
##	3	1.1951	nan	0.1000	0.0078
##	4	1.1696	nan	0.1000	0.0135
##	5	1.1454	nan	0.1000	0.0111
##	6	1.1249	nan	0.1000	0.0095
##	7	1.1045	nan	0.1000	0.0035
##	8	1.0864	nan	0.1000	0.0065
##	9	1.0701	nan	0.1000	0.0070
##	10	1.0558	nan	0.1000	0.0050
##	20	0.9590	nan	0.1000	0.0019
##	40	0.8805	nan	0.1000	0.0010
##	60	0.8376	nan	0.1000	-0.0011
##	80	0.8084	nan	0.1000	-0.0001
##	100	0.7890	nan	0.1000	-0.0012
##	120	0.7714	nan	0.1000	-0.0012
##	140	0.7590	nan	0.1000	-0.0006
##	160	0.7481	nan	0.1000	-0.0003
##	180	0.7395	nan	0.1000	-0.0006
##	200	0.7301	nan	0.1000	-0.0016
##	220	0.7192	nan	0.1000	-0.0006
##	240	0.7095	nan	0.1000	-0.0008
##	250	0.7045	nan	0.1000	-0.0006

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2410	nan	0.1000	0.0219
##	2	1.1940	nan	0.1000	0.0203
##	3	1.1606	nan	0.1000	0.0166
##	4	1.1278	nan	0.1000	0.0155
##	5	1.1017	nan	0.1000	0.0105
##	6	1.0737	nan	0.1000	0.0084
##	7	1.0547	nan	0.1000	0.0079
##	8	1.0356	nan	0.1000	0.0048
##	9	1.0176	nan	0.1000	0.0052
##	10	1.0036	nan	0.1000	0.0045
##	20	0.9014	nan	0.1000	0.0022
##	40	0.8134	nan	0.1000	-0.0033
##	60	0.7544	nan	0.1000	-0.0020
##	80	0.7130	nan	0.1000	-0.0001
##	100	0.6858	nan	0.1000	-0.0027
##	120	0.6607	nan	0.1000	-0.0014
##	140	0.6335	nan	0.1000	-0.0021
##	160	0.6064	nan	0.1000	-0.0026
##	180	0.5849	nan	0.1000	-0.0001

##	200	0.5660	nan	0.1000	-0.0014
##	220	0.5513	nan	0.1000	-0.0023
##	240	0.5310	nan	0.1000	-0.0031
##	250	0.5217	nan	0.1000	-0.0010
##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2406	nan	0.1000	0.0197
##	2	1.1871	nan	0.1000	0.0198
##	3	1.1422	nan	0.1000	0.0166
##	4	1.1091	nan	0.1000	0.0146
##	5	1.0793	nan	0.1000	0.0128
##	6	1.0464	nan	0.1000	0.0107
##	7	1.0212	nan	0.1000	0.0102
##	8	0.9991	nan	0.1000	0.0081
##	9	0.9784	nan	0.1000	0.0071
##	10	0.9625	nan	0.1000	0.0042
##	20	0.8423	nan	0.1000	0.0000
##	40	0.7386	nan	0.1000	0.0004
##	60	0.6741	nan	0.1000	-0.0017
##	80	0.6282	nan	0.1000	-0.0030
##	100	0.5798	nan	0.1000	-0.0010
##	120	0.5403	nan	0.1000	-0.0027
##	140	0.5093	nan	0.1000	-0.0011
##	160	0.4821	nan	0.1000	-0.0013
##	180	0.4550	nan	0.1000	-0.0022
##	200	0.4272	nan	0.1000	-0.0017
##	220	0.4045	nan	0.1000	-0.0010
##	240	0.3779	nan	0.1000	-0.0016
##	250	0.3675	nan	0.1000	-0.0013
##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2310	nan	0.1000	0.0265
##	2	1.1754	nan	0.1000	0.0229
##	3	1.1306	nan	0.1000	0.0159
##	4	1.0848	nan	0.1000	0.0172
##	5	1.0530	nan	0.1000	0.0092
##	6	1.0239	nan	0.1000	0.0082
##	7	1.0014	nan	0.1000	0.0072
##	8	0.9810	nan	0.1000	0.0049
##	9	0.9567	nan	0.1000	0.0100
##	10	0.9398	nan	0.1000	0.0058
##	20	0.8123	nan	0.1000	-0.0003
##	40	0.6913	nan	0.1000	-0.0016
##	60	0.6188	nan	0.1000	-0.0026
##	80	0.5672	nan	0.1000	-0.0054
##	100	0.5079	nan	0.1000	-0.0006
##	120	0.4697	nan	0.1000	-0.0010
##	140	0.4335	nan	0.1000	-0.0028
##	160	0.3993	nan	0.1000	-0.0026
##	180	0.3613	nan	0.1000	-0.0016
##	200	0.3376	nan	0.1000	-0.0034
##	220	0.3113	nan	0.1000	-0.0016
##	240	0.2890	nan	0.1000	-0.0011
##	250	0.2799	nan	0.1000	-0.0005

```
##
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1         1.2155           nan         0.1000     0.0360
##      2         1.1657           nan         0.1000     0.0186
##      3         1.1180           nan         0.1000     0.0216
##      4         1.0793           nan         0.1000     0.0110
##      5         1.0467           nan         0.1000     0.0101
##      6         1.0106           nan         0.1000     0.0152
##      7         0.9791           nan         0.1000     0.0114
##      8         0.9575           nan         0.1000     0.0044
##      9         0.9361           nan         0.1000     0.0060
##     10         0.9175           nan         0.1000     0.0032
##     20         0.7858           nan         0.1000    -0.0009
##     40         0.6412           nan         0.1000    -0.0031
##     60         0.5569           nan         0.1000    -0.0017
##     80         0.4853           nan         0.1000    -0.0003
##    100         0.4295           nan         0.1000    -0.0030
##    120         0.3812           nan         0.1000    -0.0018
##    140         0.3411           nan         0.1000    -0.0019
##    160         0.3062           nan         0.1000    -0.0021
##    180         0.2801           nan         0.1000    -0.0012
##    200         0.2488           nan         0.1000    -0.0005
##    220         0.2252           nan         0.1000    -0.0006
##    240         0.2066           nan         0.1000    -0.0010
##    250         0.1965           nan         0.1000    -0.0008
##
```

```
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1         1.2641           nan         0.1000     0.0145
##      2         1.2296           nan         0.1000     0.0145
##      3         1.2017           nan         0.1000     0.0126
##      4         1.1787           nan         0.1000     0.0096
##      5         1.1543           nan         0.1000     0.0108
##      6         1.1354           nan         0.1000     0.0081
##      7         1.1193           nan         0.1000     0.0073
##      8         1.1022           nan         0.1000     0.0049
##      9         1.0888           nan         0.1000     0.0049
##     10         1.0741           nan         0.1000     0.0040
##     20         0.9787           nan         0.1000     0.0022
##     40         0.9001           nan         0.1000     0.0004
##     60         0.8546           nan         0.1000    -0.0026
##     80         0.8278           nan         0.1000    -0.0010
##    100         0.8063           nan         0.1000    -0.0000
##    120         0.7859           nan         0.1000    -0.0004
##    140         0.7775           nan         0.1000    -0.0008
##    160         0.7654           nan         0.1000    -0.0003
##    180         0.7546           nan         0.1000    -0.0008
##    200         0.7431           nan         0.1000    -0.0007
##    220         0.7333           nan         0.1000    -0.0016
##    240         0.7258           nan         0.1000    -0.0004
##    250         0.7218           nan         0.1000    -0.0013
##
```

```
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1         1.2476           nan         0.1000     0.0237
##      2         1.2068           nan         0.1000     0.0166
```

##	3	1.1736	nan	0.1000	0.0085
##	4	1.1382	nan	0.1000	0.0146
##	5	1.1097	nan	0.1000	0.0120
##	6	1.0857	nan	0.1000	0.0076
##	7	1.0621	nan	0.1000	0.0078
##	8	1.0419	nan	0.1000	0.0093
##	9	1.0249	nan	0.1000	0.0059
##	10	1.0108	nan	0.1000	0.0031
##	20	0.9095	nan	0.1000	-0.0022
##	40	0.8234	nan	0.1000	-0.0009
##	60	0.7680	nan	0.1000	-0.0018
##	80	0.7302	nan	0.1000	-0.0001
##	100	0.6922	nan	0.1000	-0.0022
##	120	0.6656	nan	0.1000	-0.0020
##	140	0.6389	nan	0.1000	-0.0027
##	160	0.6169	nan	0.1000	-0.0018
##	180	0.6044	nan	0.1000	-0.0035
##	200	0.5843	nan	0.1000	-0.0019
##	220	0.5709	nan	0.1000	-0.0014
##	240	0.5566	nan	0.1000	-0.0006
##	250	0.5496	nan	0.1000	-0.0016

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2337	nan	0.1000	0.0273
##	2	1.1955	nan	0.1000	0.0138
##	3	1.1572	nan	0.1000	0.0171
##	4	1.1183	nan	0.1000	0.0123
##	5	1.0902	nan	0.1000	0.0085
##	6	1.0659	nan	0.1000	0.0070
##	7	1.0414	nan	0.1000	0.0067
##	8	1.0187	nan	0.1000	0.0075
##	9	0.9979	nan	0.1000	0.0072
##	10	0.9804	nan	0.1000	0.0064
##	20	0.8696	nan	0.1000	0.0005
##	40	0.7694	nan	0.1000	-0.0025
##	60	0.7096	nan	0.1000	-0.0025
##	80	0.6583	nan	0.1000	-0.0009
##	100	0.6081	nan	0.1000	-0.0019
##	120	0.5709	nan	0.1000	-0.0018
##	140	0.5250	nan	0.1000	-0.0005
##	160	0.5004	nan	0.1000	-0.0016
##	180	0.4705	nan	0.1000	-0.0021
##	200	0.4422	nan	0.1000	-0.0022
##	220	0.4176	nan	0.1000	-0.0014
##	240	0.3920	nan	0.1000	-0.0009
##	250	0.3819	nan	0.1000	-0.0007

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2390	nan	0.1000	0.0219
##	2	1.1796	nan	0.1000	0.0216
##	3	1.1326	nan	0.1000	0.0186
##	4	1.0990	nan	0.1000	0.0102
##	5	1.0656	nan	0.1000	0.0134
##	6	1.0333	nan	0.1000	0.0114

##	7	1.0105	nan	0.1000	0.0059
##	8	0.9851	nan	0.1000	0.0090
##	9	0.9648	nan	0.1000	0.0063
##	10	0.9426	nan	0.1000	0.0081
##	20	0.8281	nan	0.1000	0.0009
##	40	0.7239	nan	0.1000	-0.0024
##	60	0.6534	nan	0.1000	-0.0045
##	80	0.5838	nan	0.1000	0.0005
##	100	0.5310	nan	0.1000	-0.0014
##	120	0.4772	nan	0.1000	-0.0017
##	140	0.4347	nan	0.1000	-0.0006
##	160	0.3973	nan	0.1000	-0.0017
##	180	0.3643	nan	0.1000	-0.0015
##	200	0.3351	nan	0.1000	-0.0014
##	220	0.3080	nan	0.1000	-0.0006
##	240	0.2884	nan	0.1000	-0.0016
##	250	0.2787	nan	0.1000	-0.0025

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2235	nan	0.1000	0.0305
##	2	1.1717	nan	0.1000	0.0213
##	3	1.1255	nan	0.1000	0.0206
##	4	1.0815	nan	0.1000	0.0135
##	5	1.0512	nan	0.1000	0.0125
##	6	1.0231	nan	0.1000	0.0108
##	7	0.9928	nan	0.1000	0.0097
##	8	0.9708	nan	0.1000	0.0067
##	9	0.9462	nan	0.1000	0.0082
##	10	0.9246	nan	0.1000	0.0070
##	20	0.7970	nan	0.1000	-0.0003
##	40	0.6659	nan	0.1000	-0.0012
##	60	0.5708	nan	0.1000	-0.0037
##	80	0.5038	nan	0.1000	-0.0009
##	100	0.4473	nan	0.1000	-0.0022
##	120	0.3998	nan	0.1000	-0.0026
##	140	0.3579	nan	0.1000	-0.0009
##	160	0.3279	nan	0.1000	-0.0015
##	180	0.2972	nan	0.1000	-0.0017
##	200	0.2697	nan	0.1000	-0.0012
##	220	0.2426	nan	0.1000	-0.0013
##	240	0.2197	nan	0.1000	-0.0017
##	250	0.2111	nan	0.1000	-0.0010

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2541	nan	0.1000	0.0174
##	2	1.2220	nan	0.1000	0.0150
##	3	1.1930	nan	0.1000	0.0120
##	4	1.1686	nan	0.1000	0.0097
##	5	1.1471	nan	0.1000	0.0069
##	6	1.1250	nan	0.1000	0.0065
##	7	1.1084	nan	0.1000	0.0069
##	8	1.0915	nan	0.1000	0.0050
##	9	1.0811	nan	0.1000	0.0038
##	10	1.0656	nan	0.1000	0.0055

##	20	0.9841	nan	0.1000	0.0006
##	40	0.8948	nan	0.1000	0.0005
##	60	0.8527	nan	0.1000	-0.0001
##	80	0.8282	nan	0.1000	-0.0003
##	100	0.8106	nan	0.1000	-0.0008
##	120	0.7928	nan	0.1000	-0.0005
##	140	0.7772	nan	0.1000	-0.0012
##	160	0.7647	nan	0.1000	-0.0013
##	180	0.7555	nan	0.1000	-0.0036
##	200	0.7469	nan	0.1000	-0.0010
##	220	0.7362	nan	0.1000	0.0001
##	240	0.7258	nan	0.1000	-0.0017
##	250	0.7208	nan	0.1000	-0.0009

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2534	nan	0.1000	0.0197
##	2	1.2130	nan	0.1000	0.0167
##	3	1.1757	nan	0.1000	0.0133
##	4	1.1488	nan	0.1000	0.0106
##	5	1.1202	nan	0.1000	0.0083
##	6	1.0943	nan	0.1000	0.0108
##	7	1.0694	nan	0.1000	0.0102
##	8	1.0509	nan	0.1000	0.0058
##	9	1.0324	nan	0.1000	0.0063
##	10	1.0123	nan	0.1000	0.0076
##	20	0.9053	nan	0.1000	0.0009
##	40	0.8199	nan	0.1000	-0.0023
##	60	0.7674	nan	0.1000	-0.0000
##	80	0.7286	nan	0.1000	-0.0017
##	100	0.6913	nan	0.1000	-0.0011
##	120	0.6628	nan	0.1000	-0.0014
##	140	0.6380	nan	0.1000	-0.0026
##	160	0.6113	nan	0.1000	-0.0024
##	180	0.5884	nan	0.1000	-0.0016
##	200	0.5679	nan	0.1000	-0.0007
##	220	0.5458	nan	0.1000	-0.0003
##	240	0.5287	nan	0.1000	-0.0010
##	250	0.5165	nan	0.1000	-0.0013

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2426	nan	0.1000	0.0257
##	2	1.1972	nan	0.1000	0.0205
##	3	1.1570	nan	0.1000	0.0148
##	4	1.1192	nan	0.1000	0.0162
##	5	1.0864	nan	0.1000	0.0127
##	6	1.0568	nan	0.1000	0.0101
##	7	1.0336	nan	0.1000	0.0084
##	8	1.0130	nan	0.1000	0.0081
##	9	0.9915	nan	0.1000	0.0090
##	10	0.9724	nan	0.1000	0.0050
##	20	0.8547	nan	0.1000	0.0001
##	40	0.7543	nan	0.1000	-0.0031
##	60	0.6925	nan	0.1000	-0.0042
##	80	0.6445	nan	0.1000	-0.0024

##	100	0.5911	nan	0.1000	-0.0020
##	120	0.5506	nan	0.1000	-0.0014
##	140	0.5110	nan	0.1000	-0.0003
##	160	0.4720	nan	0.1000	-0.0013
##	180	0.4412	nan	0.1000	-0.0018
##	200	0.4174	nan	0.1000	-0.0016
##	220	0.3941	nan	0.1000	-0.0021
##	240	0.3739	nan	0.1000	-0.0012
##	250	0.3624	nan	0.1000	-0.0013

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2332	nan	0.1000	0.0251
##	2	1.1801	nan	0.1000	0.0229
##	3	1.1313	nan	0.1000	0.0200
##	4	1.0939	nan	0.1000	0.0134
##	5	1.0592	nan	0.1000	0.0151
##	6	1.0290	nan	0.1000	0.0122
##	7	1.0036	nan	0.1000	0.0107
##	8	0.9807	nan	0.1000	0.0060
##	9	0.9591	nan	0.1000	0.0077
##	10	0.9429	nan	0.1000	0.0035
##	20	0.8197	nan	0.1000	-0.0020
##	40	0.6977	nan	0.1000	-0.0005
##	60	0.6244	nan	0.1000	-0.0024
##	80	0.5599	nan	0.1000	-0.0027
##	100	0.5080	nan	0.1000	-0.0026
##	120	0.4561	nan	0.1000	-0.0011
##	140	0.4125	nan	0.1000	-0.0016
##	160	0.3776	nan	0.1000	-0.0020
##	180	0.3426	nan	0.1000	-0.0008
##	200	0.3120	nan	0.1000	-0.0010
##	220	0.2892	nan	0.1000	-0.0007
##	240	0.2695	nan	0.1000	-0.0006
##	250	0.2601	nan	0.1000	-0.0007

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2310	nan	0.1000	0.0279
##	2	1.1738	nan	0.1000	0.0250
##	3	1.1284	nan	0.1000	0.0157
##	4	1.0839	nan	0.1000	0.0137
##	5	1.0455	nan	0.1000	0.0094
##	6	1.0192	nan	0.1000	0.0080
##	7	0.9885	nan	0.1000	0.0121
##	8	0.9681	nan	0.1000	0.0046
##	9	0.9434	nan	0.1000	0.0076
##	10	0.9230	nan	0.1000	0.0061
##	20	0.7803	nan	0.1000	-0.0008
##	40	0.6531	nan	0.1000	-0.0000
##	60	0.5698	nan	0.1000	-0.0038
##	80	0.5004	nan	0.1000	-0.0020
##	100	0.4362	nan	0.1000	-0.0013
##	120	0.3871	nan	0.1000	-0.0012
##	140	0.3438	nan	0.1000	-0.0011
##	160	0.3076	nan	0.1000	-0.0010

##	180	0.2800	nan	0.1000	-0.0007
##	200	0.2489	nan	0.1000	-0.0021
##	220	0.2251	nan	0.1000	-0.0002
##	240	0.2037	nan	0.1000	-0.0005
##	250	0.1938	nan	0.1000	-0.0004
##					

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2494	nan	0.1000	0.0192
##	2	1.2166	nan	0.1000	0.0159
##	3	1.1873	nan	0.1000	0.0120
##	4	1.1636	nan	0.1000	0.0101
##	5	1.1421	nan	0.1000	0.0100
##	6	1.1141	nan	0.1000	0.0095
##	7	1.0957	nan	0.1000	0.0051
##	8	1.0790	nan	0.1000	0.0072
##	9	1.0584	nan	0.1000	0.0066
##	10	1.0425	nan	0.1000	0.0065
##	20	0.9453	nan	0.1000	0.0017
##	40	0.8528	nan	0.1000	-0.0009
##	60	0.8082	nan	0.1000	-0.0002
##	80	0.7865	nan	0.1000	-0.0007
##	100	0.7662	nan	0.1000	-0.0014
##	120	0.7474	nan	0.1000	-0.0010
##	140	0.7299	nan	0.1000	-0.0009
##	160	0.7182	nan	0.1000	-0.0019
##	180	0.7069	nan	0.1000	-0.0014
##	200	0.6959	nan	0.1000	-0.0005
##	220	0.6849	nan	0.1000	-0.0015
##	240	0.6768	nan	0.1000	-0.0009
##	250	0.6714	nan	0.1000	-0.0012
##					

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2481	nan	0.1000	0.0226
##	2	1.1981	nan	0.1000	0.0202
##	3	1.1576	nan	0.1000	0.0154
##	4	1.1288	nan	0.1000	0.0096
##	5	1.0987	nan	0.1000	0.0125
##	6	1.0691	nan	0.1000	0.0120
##	7	1.0464	nan	0.1000	0.0094
##	8	1.0227	nan	0.1000	0.0094
##	9	1.0049	nan	0.1000	0.0071
##	10	0.9858	nan	0.1000	0.0073
##	20	0.8817	nan	0.1000	0.0012
##	40	0.7880	nan	0.1000	-0.0004
##	60	0.7199	nan	0.1000	-0.0005
##	80	0.6808	nan	0.1000	-0.0031
##	100	0.6498	nan	0.1000	-0.0010
##	120	0.6253	nan	0.1000	-0.0028
##	140	0.5965	nan	0.1000	-0.0017
##	160	0.5738	nan	0.1000	-0.0005
##	180	0.5502	nan	0.1000	-0.0014
##	200	0.5266	nan	0.1000	-0.0014
##	220	0.5103	nan	0.1000	-0.0022
##	240	0.4892	nan	0.1000	-0.0019

```
##      250      0.4853      nan      0.1000     -0.0018
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2271      nan      0.1000     0.0295
##      2      1.1739      nan      0.1000     0.0241
##      3      1.1400      nan      0.1000     0.0139
##      4      1.0937      nan      0.1000     0.0186
##      5      1.0634      nan      0.1000     0.0107
##      6      1.0429      nan      0.1000     0.0072
##      7      1.0180      nan      0.1000     0.0096
##      8      0.9927      nan      0.1000     0.0086
##      9      0.9717      nan      0.1000     0.0061
##     10      0.9510      nan      0.1000     0.0038
##     20      0.8335      nan      0.1000     0.0011
##     40      0.7213      nan      0.1000     0.0005
##     60      0.6514      nan      0.1000    -0.0010
##     80      0.5999      nan      0.1000    -0.0007
##    100      0.5606      nan      0.1000    -0.0012
##    120      0.5234      nan      0.1000    -0.0011
##    140      0.4874      nan      0.1000    -0.0019
##    160      0.4608      nan      0.1000    -0.0029
##    180      0.4330      nan      0.1000    -0.0021
##    200      0.4090      nan      0.1000    -0.0017
##    220      0.3862      nan      0.1000    -0.0009
##    240      0.3661      nan      0.1000    -0.0018
##    250      0.3549      nan      0.1000    -0.0012
##
```

```
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2322      nan      0.1000     0.0270
##      2      1.1747      nan      0.1000     0.0222
##      3      1.1289      nan      0.1000     0.0183
##      4      1.0821      nan      0.1000     0.0194
##      5      1.0393      nan      0.1000     0.0155
##      6      1.0067      nan      0.1000     0.0134
##      7      0.9782      nan      0.1000     0.0072
##      8      0.9556      nan      0.1000     0.0066
##      9      0.9324      nan      0.1000     0.0060
##     10      0.9161      nan      0.1000     0.0042
##     20      0.7868      nan      0.1000     0.0022
##     40      0.6726      nan      0.1000    -0.0035
##     60      0.6019      nan      0.1000    -0.0036
##     80      0.5301      nan      0.1000    -0.0012
##    100      0.4761      nan      0.1000    -0.0025
##    120      0.4290      nan      0.1000    -0.0014
##    140      0.3905      nan      0.1000    -0.0010
##    160      0.3595      nan      0.1000    -0.0025
##    180      0.3297      nan      0.1000    -0.0017
##    200      0.3019      nan      0.1000    -0.0027
##    220      0.2812      nan      0.1000    -0.0012
##    240      0.2592      nan      0.1000    -0.0006
##    250      0.2485      nan      0.1000    -0.0012
##
```

```
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2211      nan      0.1000     0.0324
```

##	2	1.1647	nan	0.1000	0.0246
##	3	1.1206	nan	0.1000	0.0196
##	4	1.0802	nan	0.1000	0.0138
##	5	1.0451	nan	0.1000	0.0125
##	6	1.0091	nan	0.1000	0.0154
##	7	0.9791	nan	0.1000	0.0093
##	8	0.9527	nan	0.1000	0.0093
##	9	0.9248	nan	0.1000	0.0065
##	10	0.9008	nan	0.1000	0.0070
##	20	0.7504	nan	0.1000	-0.0007
##	40	0.6198	nan	0.1000	-0.0016
##	60	0.5321	nan	0.1000	-0.0017
##	80	0.4659	nan	0.1000	-0.0034
##	100	0.4165	nan	0.1000	-0.0026
##	120	0.3705	nan	0.1000	-0.0018
##	140	0.3328	nan	0.1000	-0.0016
##	160	0.3013	nan	0.1000	-0.0023
##	180	0.2719	nan	0.1000	-0.0016
##	200	0.2439	nan	0.1000	-0.0016
##	220	0.2171	nan	0.1000	-0.0018
##	240	0.1952	nan	0.1000	-0.0009
##	250	0.1848	nan	0.1000	-0.0013

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2510	nan	0.1000	0.0145
##	2	1.2198	nan	0.1000	0.0118
##	3	1.1973	nan	0.1000	0.0078
##	4	1.1766	nan	0.1000	0.0074
##	5	1.1553	nan	0.1000	0.0077
##	6	1.1352	nan	0.1000	0.0079
##	7	1.1205	nan	0.1000	0.0068
##	8	1.1069	nan	0.1000	0.0065
##	9	1.0932	nan	0.1000	0.0055
##	10	1.0773	nan	0.1000	0.0063
##	20	0.9827	nan	0.1000	0.0015
##	40	0.8952	nan	0.1000	0.0010
##	60	0.8471	nan	0.1000	-0.0022
##	80	0.8170	nan	0.1000	-0.0003
##	100	0.7972	nan	0.1000	-0.0016
##	120	0.7847	nan	0.1000	-0.0009
##	140	0.7715	nan	0.1000	-0.0006
##	160	0.7531	nan	0.1000	-0.0015
##	180	0.7457	nan	0.1000	-0.0010
##	200	0.7350	nan	0.1000	-0.0006
##	220	0.7264	nan	0.1000	-0.0015
##	240	0.7179	nan	0.1000	-0.0017
##	250	0.7153	nan	0.1000	-0.0005

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2449	nan	0.1000	0.0215
##	2	1.2112	nan	0.1000	0.0149
##	3	1.1707	nan	0.1000	0.0149
##	4	1.1412	nan	0.1000	0.0097
##	5	1.1115	nan	0.1000	0.0081

##	6	1.0887	nan	0.1000	0.0093
##	7	1.0653	nan	0.1000	0.0090
##	8	1.0485	nan	0.1000	0.0049
##	9	1.0310	nan	0.1000	0.0064
##	10	1.0142	nan	0.1000	0.0059
##	20	0.9110	nan	0.1000	0.0022
##	40	0.8138	nan	0.1000	-0.0006
##	60	0.7644	nan	0.1000	-0.0016
##	80	0.7339	nan	0.1000	-0.0013
##	100	0.6987	nan	0.1000	-0.0029
##	120	0.6718	nan	0.1000	-0.0021
##	140	0.6483	nan	0.1000	-0.0016
##	160	0.6184	nan	0.1000	-0.0011
##	180	0.5949	nan	0.1000	-0.0019
##	200	0.5727	nan	0.1000	-0.0009
##	220	0.5519	nan	0.1000	-0.0033
##	240	0.5333	nan	0.1000	-0.0016
##	250	0.5244	nan	0.1000	-0.0019

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2380	nan	0.1000	0.0238
##	2	1.1868	nan	0.1000	0.0201
##	3	1.1471	nan	0.1000	0.0150
##	4	1.1082	nan	0.1000	0.0169
##	5	1.0795	nan	0.1000	0.0134
##	6	1.0517	nan	0.1000	0.0112
##	7	1.0268	nan	0.1000	0.0087
##	8	1.0089	nan	0.1000	0.0062
##	9	0.9877	nan	0.1000	0.0064
##	10	0.9695	nan	0.1000	0.0033
##	20	0.8596	nan	0.1000	-0.0030
##	40	0.7475	nan	0.1000	-0.0009
##	60	0.6806	nan	0.1000	-0.0019
##	80	0.6326	nan	0.1000	-0.0030
##	100	0.5916	nan	0.1000	-0.0021
##	120	0.5512	nan	0.1000	-0.0018
##	140	0.5149	nan	0.1000	-0.0009
##	160	0.4835	nan	0.1000	-0.0012
##	180	0.4525	nan	0.1000	-0.0013
##	200	0.4282	nan	0.1000	-0.0016
##	220	0.4059	nan	0.1000	-0.0008
##	240	0.3858	nan	0.1000	-0.0023
##	250	0.3743	nan	0.1000	-0.0007

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2288	nan	0.1000	0.0264
##	2	1.1718	nan	0.1000	0.0213
##	3	1.1303	nan	0.1000	0.0149
##	4	1.0923	nan	0.1000	0.0186
##	5	1.0601	nan	0.1000	0.0114
##	6	1.0335	nan	0.1000	0.0090
##	7	1.0121	nan	0.1000	0.0056
##	8	0.9898	nan	0.1000	0.0087
##	9	0.9648	nan	0.1000	0.0076

##	10	0.9436	nan	0.1000	0.0055
##	20	0.8233	nan	0.1000	0.0011
##	40	0.7016	nan	0.1000	-0.0006
##	60	0.6283	nan	0.1000	-0.0011
##	80	0.5722	nan	0.1000	-0.0023
##	100	0.5218	nan	0.1000	-0.0013
##	120	0.4734	nan	0.1000	-0.0017
##	140	0.4293	nan	0.1000	-0.0022
##	160	0.3950	nan	0.1000	-0.0015
##	180	0.3658	nan	0.1000	-0.0030
##	200	0.3364	nan	0.1000	-0.0017
##	220	0.3090	nan	0.1000	-0.0012
##	240	0.2839	nan	0.1000	-0.0018
##	250	0.2700	nan	0.1000	-0.0012

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2233	nan	0.1000	0.0282
##	2	1.1760	nan	0.1000	0.0157
##	3	1.1336	nan	0.1000	0.0146
##	4	1.0939	nan	0.1000	0.0158
##	5	1.0613	nan	0.1000	0.0109
##	6	1.0266	nan	0.1000	0.0096
##	7	0.9997	nan	0.1000	0.0064
##	8	0.9733	nan	0.1000	0.0083
##	9	0.9575	nan	0.1000	0.0007
##	10	0.9363	nan	0.1000	0.0034
##	20	0.7852	nan	0.1000	-0.0003
##	40	0.6457	nan	0.1000	-0.0025
##	60	0.5623	nan	0.1000	-0.0003
##	80	0.5007	nan	0.1000	-0.0030
##	100	0.4483	nan	0.1000	-0.0044
##	120	0.4051	nan	0.1000	-0.0019
##	140	0.3689	nan	0.1000	-0.0015
##	160	0.3335	nan	0.1000	-0.0019
##	180	0.3013	nan	0.1000	-0.0012
##	200	0.2713	nan	0.1000	-0.0012
##	220	0.2467	nan	0.1000	-0.0008
##	240	0.2237	nan	0.1000	-0.0019
##	250	0.2137	nan	0.1000	-0.0011

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2503	nan	0.1000	0.0195
##	2	1.2206	nan	0.1000	0.0152
##	3	1.1974	nan	0.1000	0.0080
##	4	1.1638	nan	0.1000	0.0086
##	5	1.1408	nan	0.1000	0.0103
##	6	1.1216	nan	0.1000	0.0081
##	7	1.0988	nan	0.1000	0.0085
##	8	1.0838	nan	0.1000	0.0070
##	9	1.0653	nan	0.1000	0.0057
##	10	1.0507	nan	0.1000	0.0054
##	20	0.9623	nan	0.1000	-0.0001
##	40	0.8788	nan	0.1000	-0.0006
##	60	0.8302	nan	0.1000	-0.0008

##	80	0.8064	nan	0.1000	-0.0011
##	100	0.7879	nan	0.1000	-0.0007
##	120	0.7715	nan	0.1000	-0.0008
##	140	0.7583	nan	0.1000	-0.0017
##	160	0.7468	nan	0.1000	-0.0004
##	180	0.7381	nan	0.1000	-0.0012
##	200	0.7300	nan	0.1000	-0.0015
##	220	0.7244	nan	0.1000	-0.0027
##	240	0.7176	nan	0.1000	-0.0012
##	250	0.7161	nan	0.1000	-0.0011

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2434	nan	0.1000	0.0223
##	2	1.2001	nan	0.1000	0.0166
##	3	1.1584	nan	0.1000	0.0181
##	4	1.1265	nan	0.1000	0.0124
##	5	1.0991	nan	0.1000	0.0120
##	6	1.0712	nan	0.1000	0.0089
##	7	1.0523	nan	0.1000	0.0074
##	8	1.0335	nan	0.1000	0.0069
##	9	1.0109	nan	0.1000	0.0065
##	10	0.9934	nan	0.1000	0.0067
##	20	0.8865	nan	0.1000	0.0002
##	40	0.7986	nan	0.1000	-0.0020
##	60	0.7448	nan	0.1000	-0.0030
##	80	0.7083	nan	0.1000	-0.0025
##	100	0.6789	nan	0.1000	-0.0010
##	120	0.6515	nan	0.1000	-0.0027
##	140	0.6299	nan	0.1000	-0.0038
##	160	0.6029	nan	0.1000	-0.0017
##	180	0.5799	nan	0.1000	-0.0014
##	200	0.5594	nan	0.1000	-0.0023
##	220	0.5415	nan	0.1000	-0.0014
##	240	0.5226	nan	0.1000	-0.0025
##	250	0.5156	nan	0.1000	-0.0034

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2443	nan	0.1000	0.0197
##	2	1.1970	nan	0.1000	0.0213
##	3	1.1534	nan	0.1000	0.0176
##	4	1.1146	nan	0.1000	0.0152
##	5	1.0874	nan	0.1000	0.0055
##	6	1.0583	nan	0.1000	0.0133
##	7	1.0353	nan	0.1000	0.0080
##	8	1.0134	nan	0.1000	0.0062
##	9	0.9916	nan	0.1000	0.0071
##	10	0.9720	nan	0.1000	0.0064
##	20	0.8451	nan	0.1000	-0.0008
##	40	0.7347	nan	0.1000	-0.0013
##	60	0.6700	nan	0.1000	-0.0034
##	80	0.6233	nan	0.1000	-0.0013
##	100	0.5856	nan	0.1000	-0.0020
##	120	0.5557	nan	0.1000	-0.0032
##	140	0.5193	nan	0.1000	-0.0010

##	160	0.4843	nan	0.1000	-0.0025
##	180	0.4581	nan	0.1000	-0.0021
##	200	0.4348	nan	0.1000	-0.0016
##	220	0.4148	nan	0.1000	-0.0012
##	240	0.3895	nan	0.1000	-0.0010
##	250	0.3790	nan	0.1000	-0.0017

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2170	nan	0.1000	0.0303
##	2	1.1698	nan	0.1000	0.0191
##	3	1.1159	nan	0.1000	0.0224
##	4	1.0756	nan	0.1000	0.0115
##	5	1.0418	nan	0.1000	0.0154
##	6	1.0125	nan	0.1000	0.0097
##	7	0.9919	nan	0.1000	0.0083
##	8	0.9626	nan	0.1000	0.0094
##	9	0.9451	nan	0.1000	0.0039
##	10	0.9257	nan	0.1000	0.0038
##	20	0.8097	nan	0.1000	0.0004
##	40	0.6935	nan	0.1000	-0.0008
##	60	0.6152	nan	0.1000	-0.0006
##	80	0.5550	nan	0.1000	-0.0029
##	100	0.4995	nan	0.1000	-0.0041
##	120	0.4577	nan	0.1000	-0.0031
##	140	0.4198	nan	0.1000	-0.0004
##	160	0.3834	nan	0.1000	-0.0016
##	180	0.3557	nan	0.1000	-0.0015
##	200	0.3298	nan	0.1000	-0.0010
##	220	0.3038	nan	0.1000	-0.0026
##	240	0.2807	nan	0.1000	-0.0010
##	250	0.2694	nan	0.1000	-0.0010

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2252	nan	0.1000	0.0270
##	2	1.1669	nan	0.1000	0.0266
##	3	1.1193	nan	0.1000	0.0170
##	4	1.0807	nan	0.1000	0.0147
##	5	1.0458	nan	0.1000	0.0157
##	6	1.0119	nan	0.1000	0.0107
##	7	0.9853	nan	0.1000	0.0085
##	8	0.9622	nan	0.1000	0.0068
##	9	0.9397	nan	0.1000	0.0029
##	10	0.9163	nan	0.1000	0.0076
##	20	0.7708	nan	0.1000	0.0032
##	40	0.6454	nan	0.1000	-0.0017
##	60	0.5576	nan	0.1000	-0.0038
##	80	0.4898	nan	0.1000	-0.0024
##	100	0.4339	nan	0.1000	-0.0019
##	120	0.3889	nan	0.1000	-0.0027
##	140	0.3500	nan	0.1000	-0.0027
##	160	0.3125	nan	0.1000	-0.0011
##	180	0.2794	nan	0.1000	-0.0009
##	200	0.2539	nan	0.1000	-0.0013
##	220	0.2268	nan	0.1000	-0.0004


```

##      240      0.2041      nan      0.1000     -0.0010
##      250      0.1964      nan      0.1000     -0.0015
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2587      nan      0.1000     0.0158
##      2      1.2275      nan      0.1000     0.0130
##      3      1.2037      nan      0.1000     0.0108
##      4      1.1799      nan      0.1000     0.0110
##      5      1.1609      nan      0.1000     0.0072
##      6      1.1423      nan      0.1000     0.0058
##      7      1.1254      nan      0.1000     0.0086
##      8      1.1127      nan      0.1000     0.0036
##      9      1.0955      nan      0.1000     0.0059
##     10      1.0802      nan      0.1000     0.0047
##     20      0.9896      nan      0.1000     0.0006
##     40      0.9041      nan      0.1000    -0.0005
##     60      0.8592      nan      0.1000    -0.0001
##     80      0.8293      nan      0.1000    -0.0022
##    100      0.8016      nan      0.1000    -0.0025
##    120      0.7862      nan      0.1000    -0.0014
##    140      0.7734      nan      0.1000     0.0001
##    160      0.7586      nan      0.1000    -0.0013
##    180      0.7501      nan      0.1000    -0.0011
##    200      0.7380      nan      0.1000    -0.0008
##    220      0.7265      nan      0.1000    -0.0007
##    240      0.7215      nan      0.1000    -0.0007
##    250      0.7179      nan      0.1000    -0.0014
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2445      nan      0.1000     0.0189
##      2      1.2085      nan      0.1000     0.0163
##      3      1.1735      nan      0.1000     0.0154
##      4      1.1411      nan      0.1000     0.0124
##      5      1.1206      nan      0.1000     0.0065
##      6      1.0951      nan      0.1000     0.0087
##      7      1.0743      nan      0.1000     0.0085
##      8      1.0547      nan      0.1000     0.0096
##      9      1.0349      nan      0.1000     0.0070
##     10      1.0221      nan      0.1000     0.0041
##     20      0.9194      nan      0.1000    -0.0005
##     40      0.8238      nan      0.1000    -0.0002
##     60      0.7739      nan      0.1000    -0.0008
##     80      0.7323      nan      0.1000    -0.0024
##    100      0.6990      nan      0.1000    -0.0010
##    120      0.6770      nan      0.1000    -0.0010
##    140      0.6546      nan      0.1000    -0.0023
##    160      0.6354      nan      0.1000    -0.0016
##    180      0.6111      nan      0.1000    -0.0012
##    200      0.5919      nan      0.1000    -0.0021
##    220      0.5710      nan      0.1000    -0.0012
##    240      0.5525      nan      0.1000    -0.0013
##    250      0.5421      nan      0.1000    -0.0008
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve

```

##	1	1.2365	nan	0.1000	0.0250
##	2	1.1887	nan	0.1000	0.0181
##	3	1.1455	nan	0.1000	0.0185
##	4	1.1114	nan	0.1000	0.0122
##	5	1.0870	nan	0.1000	0.0090
##	6	1.0611	nan	0.1000	0.0098
##	7	1.0337	nan	0.1000	0.0115
##	8	1.0170	nan	0.1000	0.0045
##	9	0.9974	nan	0.1000	0.0067
##	10	0.9805	nan	0.1000	0.0035
##	20	0.8627	nan	0.1000	0.0005
##	40	0.7523	nan	0.1000	-0.0008
##	60	0.6904	nan	0.1000	-0.0013
##	80	0.6394	nan	0.1000	-0.0016
##	100	0.5997	nan	0.1000	-0.0014
##	120	0.5696	nan	0.1000	-0.0026
##	140	0.5416	nan	0.1000	-0.0025
##	160	0.5104	nan	0.1000	-0.0028
##	180	0.4777	nan	0.1000	-0.0007
##	200	0.4497	nan	0.1000	-0.0020
##	220	0.4248	nan	0.1000	-0.0022
##	240	0.4032	nan	0.1000	-0.0028
##	250	0.3911	nan	0.1000	-0.0011

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2376	nan	0.1000	0.0238
##	2	1.1787	nan	0.1000	0.0206
##	3	1.1376	nan	0.1000	0.0158
##	4	1.1012	nan	0.1000	0.0147
##	5	1.0688	nan	0.1000	0.0083
##	6	1.0375	nan	0.1000	0.0074
##	7	1.0104	nan	0.1000	0.0068
##	8	0.9852	nan	0.1000	0.0108
##	9	0.9654	nan	0.1000	0.0070
##	10	0.9470	nan	0.1000	0.0053
##	20	0.8294	nan	0.1000	-0.0006
##	40	0.7205	nan	0.1000	-0.0032
##	60	0.6374	nan	0.1000	0.0006
##	80	0.5774	nan	0.1000	-0.0012
##	100	0.5261	nan	0.1000	-0.0027
##	120	0.4859	nan	0.1000	-0.0013
##	140	0.4424	nan	0.1000	-0.0015
##	160	0.4063	nan	0.1000	-0.0008
##	180	0.3746	nan	0.1000	-0.0005
##	200	0.3438	nan	0.1000	-0.0022
##	220	0.3180	nan	0.1000	-0.0006
##	240	0.2961	nan	0.1000	-0.0015
##	250	0.2838	nan	0.1000	-0.0019

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2370	nan	0.1000	0.0231
##	2	1.1737	nan	0.1000	0.0248
##	3	1.1232	nan	0.1000	0.0202
##	4	1.0832	nan	0.1000	0.0127

##	5	1.0443	nan	0.1000	0.0167
##	6	1.0138	nan	0.1000	0.0100
##	7	0.9833	nan	0.1000	0.0096
##	8	0.9618	nan	0.1000	0.0036
##	9	0.9399	nan	0.1000	0.0063
##	10	0.9192	nan	0.1000	0.0037
##	20	0.7875	nan	0.1000	-0.0013
##	40	0.6552	nan	0.1000	-0.0030
##	60	0.5718	nan	0.1000	-0.0031
##	80	0.5041	nan	0.1000	-0.0028
##	100	0.4496	nan	0.1000	-0.0019
##	120	0.4008	nan	0.1000	-0.0020
##	140	0.3549	nan	0.1000	-0.0017
##	160	0.3226	nan	0.1000	-0.0020
##	180	0.2892	nan	0.1000	-0.0015
##	200	0.2641	nan	0.1000	-0.0017
##	220	0.2419	nan	0.1000	-0.0025
##	240	0.2188	nan	0.1000	-0.0013
##	250	0.2096	nan	0.1000	-0.0013

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2513	nan	0.1000	0.0209
##	2	1.2191	nan	0.1000	0.0139
##	3	1.1881	nan	0.1000	0.0135
##	4	1.1638	nan	0.1000	0.0115
##	5	1.1396	nan	0.1000	0.0072
##	6	1.1221	nan	0.1000	0.0067
##	7	1.1005	nan	0.1000	0.0079
##	8	1.0805	nan	0.1000	0.0064
##	9	1.0649	nan	0.1000	0.0069
##	10	1.0536	nan	0.1000	0.0045
##	20	0.9565	nan	0.1000	-0.0009
##	40	0.8708	nan	0.1000	-0.0001
##	60	0.8275	nan	0.1000	-0.0023
##	80	0.8017	nan	0.1000	-0.0006
##	100	0.7806	nan	0.1000	-0.0007
##	120	0.7678	nan	0.1000	-0.0011
##	140	0.7578	nan	0.1000	-0.0007
##	160	0.7420	nan	0.1000	-0.0013
##	180	0.7335	nan	0.1000	-0.0015
##	200	0.7225	nan	0.1000	-0.0012
##	220	0.7144	nan	0.1000	-0.0014
##	240	0.7091	nan	0.1000	-0.0011
##	250	0.7065	nan	0.1000	-0.0017

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2381	nan	0.1000	0.0225
##	2	1.1937	nan	0.1000	0.0175
##	3	1.1552	nan	0.1000	0.0181
##	4	1.1209	nan	0.1000	0.0134
##	5	1.0921	nan	0.1000	0.0111
##	6	1.0665	nan	0.1000	0.0093
##	7	1.0440	nan	0.1000	0.0094
##	8	1.0268	nan	0.1000	0.0068

##	9	1.0115	nan	0.1000	0.0046
##	10	0.9953	nan	0.1000	0.0057
##	20	0.8913	nan	0.1000	0.0035
##	40	0.8034	nan	0.1000	-0.0011
##	60	0.7467	nan	0.1000	-0.0008
##	80	0.7131	nan	0.1000	-0.0019
##	100	0.6917	nan	0.1000	-0.0029
##	120	0.6597	nan	0.1000	-0.0030
##	140	0.6327	nan	0.1000	-0.0012
##	160	0.6066	nan	0.1000	-0.0026
##	180	0.5859	nan	0.1000	-0.0007
##	200	0.5630	nan	0.1000	-0.0012
##	220	0.5459	nan	0.1000	-0.0021
##	240	0.5270	nan	0.1000	-0.0022
##	250	0.5161	nan	0.1000	-0.0022

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2373	nan	0.1000	0.0264
##	2	1.1839	nan	0.1000	0.0260
##	3	1.1394	nan	0.1000	0.0198
##	4	1.1047	nan	0.1000	0.0130
##	5	1.0713	nan	0.1000	0.0134
##	6	1.0421	nan	0.1000	0.0097
##	7	1.0193	nan	0.1000	0.0040
##	8	0.9992	nan	0.1000	0.0093
##	9	0.9785	nan	0.1000	0.0079
##	10	0.9578	nan	0.1000	0.0039
##	20	0.8385	nan	0.1000	-0.0001
##	40	0.7371	nan	0.1000	0.0007
##	60	0.6728	nan	0.1000	-0.0008
##	80	0.6258	nan	0.1000	-0.0014
##	100	0.5903	nan	0.1000	-0.0033
##	120	0.5504	nan	0.1000	-0.0018
##	140	0.5156	nan	0.1000	-0.0022
##	160	0.4855	nan	0.1000	-0.0024
##	180	0.4547	nan	0.1000	-0.0017
##	200	0.4266	nan	0.1000	-0.0012
##	220	0.4055	nan	0.1000	-0.0018
##	240	0.3804	nan	0.1000	-0.0016
##	250	0.3692	nan	0.1000	-0.0011

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2198	nan	0.1000	0.0310
##	2	1.1665	nan	0.1000	0.0235
##	3	1.1242	nan	0.1000	0.0173
##	4	1.0837	nan	0.1000	0.0161
##	5	1.0468	nan	0.1000	0.0156
##	6	1.0233	nan	0.1000	0.0096
##	7	0.9892	nan	0.1000	0.0153
##	8	0.9662	nan	0.1000	0.0091
##	9	0.9486	nan	0.1000	0.0043
##	10	0.9317	nan	0.1000	0.0033
##	20	0.7972	nan	0.1000	0.0002
##	40	0.6870	nan	0.1000	-0.0012

##	60	0.6245	nan	0.1000	-0.0045
##	80	0.5677	nan	0.1000	-0.0010
##	100	0.5135	nan	0.1000	-0.0017
##	120	0.4693	nan	0.1000	-0.0008
##	140	0.4209	nan	0.1000	-0.0015
##	160	0.3900	nan	0.1000	-0.0005
##	180	0.3585	nan	0.1000	-0.0016
##	200	0.3312	nan	0.1000	-0.0021
##	220	0.3097	nan	0.1000	-0.0017
##	240	0.2863	nan	0.1000	-0.0016
##	250	0.2753	nan	0.1000	-0.0011

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2278	nan	0.1000	0.0193
##	2	1.1705	nan	0.1000	0.0230
##	3	1.1155	nan	0.1000	0.0197
##	4	1.0724	nan	0.1000	0.0142
##	5	1.0368	nan	0.1000	0.0062
##	6	1.0054	nan	0.1000	0.0089
##	7	0.9724	nan	0.1000	0.0124
##	8	0.9465	nan	0.1000	0.0097
##	9	0.9253	nan	0.1000	0.0042
##	10	0.9018	nan	0.1000	0.0077
##	20	0.7678	nan	0.1000	-0.0005
##	40	0.6459	nan	0.1000	-0.0036
##	60	0.5631	nan	0.1000	-0.0050
##	80	0.4915	nan	0.1000	-0.0015
##	100	0.4383	nan	0.1000	-0.0021
##	120	0.3955	nan	0.1000	-0.0020
##	140	0.3501	nan	0.1000	-0.0009
##	160	0.3149	nan	0.1000	-0.0007
##	180	0.2821	nan	0.1000	-0.0014
##	200	0.2544	nan	0.1000	-0.0012
##	220	0.2270	nan	0.1000	-0.0006
##	240	0.2094	nan	0.1000	-0.0010
##	250	0.1978	nan	0.1000	-0.0006

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2537	nan	0.1000	0.0180
##	2	1.2212	nan	0.1000	0.0163
##	3	1.1972	nan	0.1000	0.0083
##	4	1.1668	nan	0.1000	0.0100
##	5	1.1460	nan	0.1000	0.0099
##	6	1.1285	nan	0.1000	0.0073
##	7	1.1132	nan	0.1000	0.0054
##	8	1.0972	nan	0.1000	0.0060
##	9	1.0903	nan	0.1000	-0.0012
##	10	1.0763	nan	0.1000	0.0054
##	20	0.9822	nan	0.1000	0.0015
##	40	0.8985	nan	0.1000	-0.0019
##	60	0.8521	nan	0.1000	-0.0007
##	80	0.8204	nan	0.1000	-0.0018
##	100	0.8029	nan	0.1000	-0.0025
##	120	0.7882	nan	0.1000	-0.0011

##	140	0.7714	nan	0.1000	-0.0020
##	160	0.7601	nan	0.1000	-0.0010
##	180	0.7484	nan	0.1000	-0.0015
##	200	0.7393	nan	0.1000	-0.0006
##	220	0.7327	nan	0.1000	-0.0027
##	240	0.7253	nan	0.1000	-0.0004
##	250	0.7179	nan	0.1000	-0.0009

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2441	nan	0.1000	0.0227
##	2	1.2034	nan	0.1000	0.0191
##	3	1.1674	nan	0.1000	0.0160
##	4	1.1349	nan	0.1000	0.0125
##	5	1.1070	nan	0.1000	0.0106
##	6	1.0854	nan	0.1000	0.0081
##	7	1.0661	nan	0.1000	0.0053
##	8	1.0438	nan	0.1000	0.0096
##	9	1.0267	nan	0.1000	0.0049
##	10	1.0092	nan	0.1000	0.0033
##	20	0.9008	nan	0.1000	-0.0004
##	40	0.8089	nan	0.1000	0.0005
##	60	0.7552	nan	0.1000	-0.0023
##	80	0.7191	nan	0.1000	-0.0023
##	100	0.6902	nan	0.1000	-0.0018
##	120	0.6670	nan	0.1000	-0.0017
##	140	0.6430	nan	0.1000	-0.0013
##	160	0.6203	nan	0.1000	-0.0003
##	180	0.5952	nan	0.1000	-0.0013
##	200	0.5773	nan	0.1000	-0.0030
##	220	0.5527	nan	0.1000	-0.0020
##	240	0.5351	nan	0.1000	-0.0030
##	250	0.5253	nan	0.1000	-0.0016

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2365	nan	0.1000	0.0261
##	2	1.1838	nan	0.1000	0.0224
##	3	1.1495	nan	0.1000	0.0146
##	4	1.1129	nan	0.1000	0.0126
##	5	1.0860	nan	0.1000	0.0102
##	6	1.0639	nan	0.1000	0.0077
##	7	1.0362	nan	0.1000	0.0099
##	8	1.0141	nan	0.1000	0.0069
##	9	0.9942	nan	0.1000	0.0075
##	10	0.9756	nan	0.1000	0.0057
##	20	0.8606	nan	0.1000	-0.0008
##	40	0.7490	nan	0.1000	-0.0022
##	60	0.6864	nan	0.1000	-0.0013
##	80	0.6342	nan	0.1000	-0.0014
##	100	0.5875	nan	0.1000	-0.0015
##	120	0.5471	nan	0.1000	-0.0002
##	140	0.5148	nan	0.1000	-0.0011
##	160	0.4855	nan	0.1000	-0.0035
##	180	0.4614	nan	0.1000	-0.0034
##	200	0.4304	nan	0.1000	-0.0022

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##      220      0.4085      nan      0.1000     -0.0008
##      240      0.3877      nan      0.1000     -0.0025
##      250      0.3825      nan      0.1000     -0.0013
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2300      nan      0.1000     0.0278
##      2      1.1748      nan      0.1000     0.0186
##      3      1.1349      nan      0.1000     0.0120
##      4      1.0943      nan      0.1000     0.0171
##      5      1.0609      nan      0.1000     0.0101
##      6      1.0354      nan      0.1000     0.0072
##      7      1.0088      nan      0.1000     0.0092
##      8      0.9852      nan      0.1000     0.0067
##      9      0.9634      nan      0.1000     0.0063
##     10      0.9403      nan      0.1000     0.0066
##     20      0.8210      nan      0.1000     0.0010
##     40      0.6992      nan      0.1000     -0.0024
##     60      0.6223      nan      0.1000     -0.0018
##     80      0.5640      nan      0.1000     -0.0010
##    100      0.5118      nan      0.1000     -0.0019
##    120      0.4647      nan      0.1000     -0.0027
##    140      0.4251      nan      0.1000     -0.0031
##    160      0.3927      nan      0.1000     -0.0017
##    180      0.3629      nan      0.1000     -0.0014
##    200      0.3354      nan      0.1000     -0.0013
##    220      0.3121      nan      0.1000     -0.0014
##    240      0.2905      nan      0.1000     -0.0018
##    250      0.2804      nan      0.1000     -0.0010
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2341      nan      0.1000     0.0292
##      2      1.1787      nan      0.1000     0.0288
##      3      1.1354      nan      0.1000     0.0138
##      4      1.0916      nan      0.1000     0.0152
##      5      1.0497      nan      0.1000     0.0096
##      6      1.0153      nan      0.1000     0.0126
##      7      0.9861      nan      0.1000     0.0098
##      8      0.9638      nan      0.1000     0.0081
##      9      0.9381      nan      0.1000     0.0074
##     10      0.9179      nan      0.1000     0.0051
##     20      0.7739      nan      0.1000     0.0025
##     40      0.6499      nan      0.1000     -0.0041
##     60      0.5636      nan      0.1000     -0.0028
##     80      0.4975      nan      0.1000     -0.0026
##    100      0.4456      nan      0.1000     -0.0038
##    120      0.4025      nan      0.1000     -0.0012
##    140      0.3578      nan      0.1000     -0.0010
##    160      0.3209      nan      0.1000     -0.0019
##    180      0.2890      nan      0.1000     -0.0020
##    200      0.2603      nan      0.1000     -0.0021
##    220      0.2359      nan      0.1000     -0.0008
##    240      0.2138      nan      0.1000     -0.0007
##    250      0.2032      nan      0.1000     -0.0011
##

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##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2556	nan	0.1000	0.0182
##	2	1.2244	nan	0.1000	0.0147
##	3	1.1976	nan	0.1000	0.0105
##	4	1.1718	nan	0.1000	0.0104
##	5	1.1498	nan	0.1000	0.0087
##	6	1.1332	nan	0.1000	0.0066
##	7	1.1134	nan	0.1000	0.0059
##	8	1.0958	nan	0.1000	0.0065
##	9	1.0835	nan	0.1000	0.0056
##	10	1.0722	nan	0.1000	0.0044
##	20	0.9739	nan	0.1000	0.0028
##	40	0.8808	nan	0.1000	-0.0006
##	60	0.8405	nan	0.1000	-0.0006
##	80	0.8127	nan	0.1000	-0.0000
##	100	0.7893	nan	0.1000	-0.0002
##	120	0.7699	nan	0.1000	-0.0013
##	140	0.7576	nan	0.1000	-0.0011
##	160	0.7460	nan	0.1000	-0.0011
##	180	0.7377	nan	0.1000	-0.0007
##	200	0.7317	nan	0.1000	-0.0006
##	220	0.7245	nan	0.1000	-0.0006
##	240	0.7124	nan	0.1000	-0.0018
##	250	0.7082	nan	0.1000	-0.0012

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2436	nan	0.1000	0.0262
##	2	1.1971	nan	0.1000	0.0178
##	3	1.1667	nan	0.1000	0.0136
##	4	1.1359	nan	0.1000	0.0117
##	5	1.1087	nan	0.1000	0.0109
##	6	1.0814	nan	0.1000	0.0098
##	7	1.0575	nan	0.1000	0.0100
##	8	1.0365	nan	0.1000	0.0106
##	9	1.0207	nan	0.1000	0.0055
##	10	1.0033	nan	0.1000	0.0039
##	20	0.9009	nan	0.1000	0.0011
##	40	0.8060	nan	0.1000	-0.0016
##	60	0.7614	nan	0.1000	-0.0030
##	80	0.7192	nan	0.1000	-0.0018
##	100	0.6904	nan	0.1000	-0.0004
##	120	0.6630	nan	0.1000	-0.0019
##	140	0.6424	nan	0.1000	-0.0018
##	160	0.6187	nan	0.1000	-0.0019
##	180	0.5994	nan	0.1000	-0.0029
##	200	0.5807	nan	0.1000	-0.0015
##	220	0.5637	nan	0.1000	-0.0012
##	240	0.5434	nan	0.1000	-0.0018
##	250	0.5327	nan	0.1000	-0.0013

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2377	nan	0.1000	0.0229
##	2	1.1837	nan	0.1000	0.0201
##	3	1.1447	nan	0.1000	0.0183

##	4	1.1044	nan	0.1000	0.0152
##	5	1.0711	nan	0.1000	0.0127
##	6	1.0518	nan	0.1000	0.0067
##	7	1.0308	nan	0.1000	0.0060
##	8	1.0054	nan	0.1000	0.0097
##	9	0.9811	nan	0.1000	0.0076
##	10	0.9671	nan	0.1000	0.0045
##	20	0.8475	nan	0.1000	-0.0003
##	40	0.7520	nan	0.1000	-0.0018
##	60	0.6963	nan	0.1000	-0.0025
##	80	0.6588	nan	0.1000	-0.0021
##	100	0.6187	nan	0.1000	-0.0024
##	120	0.5756	nan	0.1000	-0.0017
##	140	0.5447	nan	0.1000	-0.0011
##	160	0.5131	nan	0.1000	-0.0024
##	180	0.4884	nan	0.1000	-0.0023
##	200	0.4650	nan	0.1000	-0.0021
##	220	0.4380	nan	0.1000	-0.0012
##	240	0.4158	nan	0.1000	-0.0007
##	250	0.4060	nan	0.1000	-0.0024

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2351	nan	0.1000	0.0228
##	2	1.1794	nan	0.1000	0.0218
##	3	1.1379	nan	0.1000	0.0164
##	4	1.0990	nan	0.1000	0.0157
##	5	1.0628	nan	0.1000	0.0102
##	6	1.0357	nan	0.1000	0.0096
##	7	1.0117	nan	0.1000	0.0069
##	8	0.9862	nan	0.1000	0.0086
##	9	0.9656	nan	0.1000	0.0062
##	10	0.9430	nan	0.1000	0.0058
##	20	0.8187	nan	0.1000	-0.0010
##	40	0.7033	nan	0.1000	-0.0013
##	60	0.6275	nan	0.1000	-0.0030
##	80	0.5695	nan	0.1000	-0.0037
##	100	0.5168	nan	0.1000	-0.0026
##	120	0.4789	nan	0.1000	-0.0018
##	140	0.4383	nan	0.1000	-0.0013
##	160	0.4055	nan	0.1000	-0.0011
##	180	0.3760	nan	0.1000	-0.0022
##	200	0.3473	nan	0.1000	-0.0016
##	220	0.3247	nan	0.1000	-0.0022
##	240	0.3012	nan	0.1000	-0.0007
##	250	0.2915	nan	0.1000	-0.0021

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2251	nan	0.1000	0.0278
##	2	1.1711	nan	0.1000	0.0216
##	3	1.1218	nan	0.1000	0.0217
##	4	1.0730	nan	0.1000	0.0174
##	5	1.0388	nan	0.1000	0.0121
##	6	1.0066	nan	0.1000	0.0083
##	7	0.9788	nan	0.1000	0.0099

##	8	0.9523	nan	0.1000	0.0089
##	9	0.9284	nan	0.1000	0.0080
##	10	0.9036	nan	0.1000	0.0079
##	20	0.7808	nan	0.1000	-0.0006
##	40	0.6658	nan	0.1000	-0.0033
##	60	0.5865	nan	0.1000	-0.0024
##	80	0.5185	nan	0.1000	-0.0044
##	100	0.4670	nan	0.1000	-0.0015
##	120	0.4138	nan	0.1000	-0.0014
##	140	0.3727	nan	0.1000	-0.0006
##	160	0.3371	nan	0.1000	-0.0016
##	180	0.3054	nan	0.1000	-0.0013
##	200	0.2764	nan	0.1000	-0.0016
##	220	0.2543	nan	0.1000	-0.0012
##	240	0.2302	nan	0.1000	-0.0012
##	250	0.2196	nan	0.1000	-0.0007

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2546	nan	0.1000	0.0196
##	2	1.2219	nan	0.1000	0.0138
##	3	1.1958	nan	0.1000	0.0098
##	4	1.1693	nan	0.1000	0.0140
##	5	1.1445	nan	0.1000	0.0090
##	6	1.1258	nan	0.1000	0.0064
##	7	1.1067	nan	0.1000	0.0059
##	8	1.0899	nan	0.1000	0.0060
##	9	1.0730	nan	0.1000	0.0060
##	10	1.0600	nan	0.1000	0.0044
##	20	0.9660	nan	0.1000	0.0019
##	40	0.8805	nan	0.1000	-0.0002
##	60	0.8305	nan	0.1000	0.0005
##	80	0.8008	nan	0.1000	-0.0010
##	100	0.7743	nan	0.1000	-0.0012
##	120	0.7576	nan	0.1000	-0.0022
##	140	0.7449	nan	0.1000	-0.0018
##	160	0.7371	nan	0.1000	-0.0032
##	180	0.7293	nan	0.1000	-0.0031
##	200	0.7213	nan	0.1000	-0.0007
##	220	0.7136	nan	0.1000	-0.0026
##	240	0.7054	nan	0.1000	-0.0013
##	250	0.7005	nan	0.1000	-0.0008

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2405	nan	0.1000	0.0224
##	2	1.1994	nan	0.1000	0.0206
##	3	1.1643	nan	0.1000	0.0130
##	4	1.1356	nan	0.1000	0.0136
##	5	1.1094	nan	0.1000	0.0101
##	6	1.0850	nan	0.1000	0.0083
##	7	1.0639	nan	0.1000	0.0088
##	8	1.0412	nan	0.1000	0.0101
##	9	1.0241	nan	0.1000	0.0085
##	10	1.0069	nan	0.1000	0.0061
##	20	0.8919	nan	0.1000	-0.0001

##	40	0.7932	nan	0.1000	-0.0009
##	60	0.7415	nan	0.1000	-0.0017
##	80	0.7019	nan	0.1000	-0.0018
##	100	0.6749	nan	0.1000	-0.0037
##	120	0.6454	nan	0.1000	-0.0031
##	140	0.6218	nan	0.1000	-0.0025
##	160	0.5977	nan	0.1000	-0.0023
##	180	0.5713	nan	0.1000	-0.0015
##	200	0.5543	nan	0.1000	-0.0013
##	220	0.5345	nan	0.1000	-0.0009
##	240	0.5168	nan	0.1000	-0.0002
##	250	0.5051	nan	0.1000	-0.0013

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2394	nan	0.1000	0.0266
##	2	1.1839	nan	0.1000	0.0176
##	3	1.1404	nan	0.1000	0.0172
##	4	1.1024	nan	0.1000	0.0148
##	5	1.0707	nan	0.1000	0.0116
##	6	1.0435	nan	0.1000	0.0107
##	7	1.0221	nan	0.1000	0.0086
##	8	0.9995	nan	0.1000	0.0074
##	9	0.9779	nan	0.1000	0.0095
##	10	0.9633	nan	0.1000	0.0048
##	20	0.8448	nan	0.1000	-0.0001
##	40	0.7287	nan	0.1000	-0.0006
##	60	0.6687	nan	0.1000	-0.0029
##	80	0.6224	nan	0.1000	-0.0018
##	100	0.5798	nan	0.1000	-0.0018
##	120	0.5291	nan	0.1000	-0.0003
##	140	0.4985	nan	0.1000	-0.0016
##	160	0.4708	nan	0.1000	-0.0008
##	180	0.4389	nan	0.1000	-0.0021
##	200	0.4100	nan	0.1000	-0.0016
##	220	0.3882	nan	0.1000	-0.0013
##	240	0.3681	nan	0.1000	-0.0013
##	250	0.3577	nan	0.1000	-0.0020

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2289	nan	0.1000	0.0279
##	2	1.1688	nan	0.1000	0.0299
##	3	1.1255	nan	0.1000	0.0198
##	4	1.0856	nan	0.1000	0.0133
##	5	1.0566	nan	0.1000	0.0099
##	6	1.0268	nan	0.1000	0.0107
##	7	0.9960	nan	0.1000	0.0117
##	8	0.9707	nan	0.1000	0.0092
##	9	0.9490	nan	0.1000	0.0066
##	10	0.9337	nan	0.1000	0.0028
##	20	0.8129	nan	0.1000	-0.0015
##	40	0.6810	nan	0.1000	-0.0024
##	60	0.6026	nan	0.1000	-0.0019
##	80	0.5494	nan	0.1000	-0.0014
##	100	0.4936	nan	0.1000	-0.0015

##	120	0.4447	nan	0.1000	-0.0019
##	140	0.4091	nan	0.1000	-0.0023
##	160	0.3813	nan	0.1000	-0.0034
##	180	0.3504	nan	0.1000	-0.0012
##	200	0.3227	nan	0.1000	-0.0028
##	220	0.2989	nan	0.1000	-0.0019
##	240	0.2765	nan	0.1000	-0.0014
##	250	0.2704	nan	0.1000	-0.0012

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2351	nan	0.1000	0.0229
##	2	1.1759	nan	0.1000	0.0172
##	3	1.1245	nan	0.1000	0.0171
##	4	1.0855	nan	0.1000	0.0138
##	5	1.0426	nan	0.1000	0.0179
##	6	1.0125	nan	0.1000	0.0113
##	7	0.9758	nan	0.1000	0.0156
##	8	0.9446	nan	0.1000	0.0119
##	9	0.9177	nan	0.1000	0.0096
##	10	0.8958	nan	0.1000	0.0080
##	20	0.7607	nan	0.1000	-0.0000
##	40	0.6298	nan	0.1000	-0.0023
##	60	0.5502	nan	0.1000	-0.0020
##	80	0.4831	nan	0.1000	-0.0026
##	100	0.4231	nan	0.1000	-0.0015
##	120	0.3789	nan	0.1000	-0.0030
##	140	0.3332	nan	0.1000	-0.0006
##	160	0.2963	nan	0.1000	-0.0019
##	180	0.2653	nan	0.1000	-0.0009
##	200	0.2399	nan	0.1000	-0.0003
##	220	0.2134	nan	0.1000	-0.0014
##	240	0.1931	nan	0.1000	-0.0008
##	250	0.1853	nan	0.1000	-0.0014

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2571	nan	0.1000	0.0174
##	2	1.2147	nan	0.1000	0.0148
##	3	1.1870	nan	0.1000	0.0115
##	4	1.1603	nan	0.1000	0.0079
##	5	1.1408	nan	0.1000	0.0068
##	6	1.1229	nan	0.1000	0.0070
##	7	1.1048	nan	0.1000	0.0083
##	8	1.0901	nan	0.1000	0.0058
##	9	1.0739	nan	0.1000	0.0052
##	10	1.0602	nan	0.1000	0.0052
##	20	0.9752	nan	0.1000	0.0017
##	40	0.8860	nan	0.1000	0.0001
##	60	0.8394	nan	0.1000	-0.0014
##	80	0.8065	nan	0.1000	-0.0003
##	100	0.7861	nan	0.1000	-0.0008
##	120	0.7698	nan	0.1000	-0.0017
##	140	0.7567	nan	0.1000	-0.0007
##	160	0.7429	nan	0.1000	-0.0016
##	180	0.7348	nan	0.1000	-0.0017

##	200	0.7241	nan	0.1000	-0.0011
##	220	0.7151	nan	0.1000	-0.0023
##	240	0.7061	nan	0.1000	-0.0007
##	250	0.7021	nan	0.1000	-0.0007
##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2438	nan	0.1000	0.0222
##	2	1.2121	nan	0.1000	0.0101
##	3	1.1723	nan	0.1000	0.0146
##	4	1.1454	nan	0.1000	0.0129
##	5	1.1142	nan	0.1000	0.0133
##	6	1.0855	nan	0.1000	0.0096
##	7	1.0596	nan	0.1000	0.0100
##	8	1.0364	nan	0.1000	0.0067
##	9	1.0183	nan	0.1000	0.0064
##	10	1.0051	nan	0.1000	0.0023
##	20	0.9015	nan	0.1000	0.0043
##	40	0.8033	nan	0.1000	-0.0017
##	60	0.7544	nan	0.1000	-0.0008
##	80	0.7118	nan	0.1000	-0.0013
##	100	0.6836	nan	0.1000	-0.0021
##	120	0.6580	nan	0.1000	-0.0018
##	140	0.6368	nan	0.1000	-0.0028
##	160	0.6156	nan	0.1000	-0.0019
##	180	0.5912	nan	0.1000	-0.0015
##	200	0.5680	nan	0.1000	-0.0011
##	220	0.5441	nan	0.1000	-0.0006
##	240	0.5287	nan	0.1000	-0.0009
##	250	0.5221	nan	0.1000	-0.0010
##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2359	nan	0.1000	0.0218
##	2	1.1914	nan	0.1000	0.0156
##	3	1.1511	nan	0.1000	0.0146
##	4	1.1095	nan	0.1000	0.0182
##	5	1.0799	nan	0.1000	0.0115
##	6	1.0501	nan	0.1000	0.0137
##	7	1.0245	nan	0.1000	0.0091
##	8	1.0022	nan	0.1000	0.0070
##	9	0.9830	nan	0.1000	0.0063
##	10	0.9630	nan	0.1000	0.0041
##	20	0.8524	nan	0.1000	-0.0025
##	40	0.7480	nan	0.1000	-0.0017
##	60	0.6873	nan	0.1000	-0.0021
##	80	0.6409	nan	0.1000	-0.0026
##	100	0.6030	nan	0.1000	-0.0032
##	120	0.5477	nan	0.1000	-0.0008
##	140	0.5126	nan	0.1000	-0.0016
##	160	0.4829	nan	0.1000	-0.0027
##	180	0.4525	nan	0.1000	-0.0016
##	200	0.4305	nan	0.1000	-0.0002
##	220	0.4060	nan	0.1000	-0.0026
##	240	0.3822	nan	0.1000	-0.0013
##	250	0.3711	nan	0.1000	0.0000

```

##
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1          1.2314          nan      0.1000      0.0278
##      2          1.1786          nan      0.1000      0.0211
##      3          1.1324          nan      0.1000      0.0152
##      4          1.0927          nan      0.1000      0.0169
##      5          1.0606          nan      0.1000      0.0124
##      6          1.0306          nan      0.1000      0.0129
##      7          1.0082          nan      0.1000      0.0078
##      8          0.9800          nan      0.1000      0.0096
##      9          0.9568          nan      0.1000      0.0067
##     10          0.9395          nan      0.1000      0.0044
##     20          0.8182          nan      0.1000     -0.0002
##     40          0.6891          nan      0.1000     -0.0024
##     60          0.6054          nan      0.1000     -0.0011
##     80          0.5376          nan      0.1000     -0.0018
##    100          0.4849          nan      0.1000     -0.0018
##    120          0.4432          nan      0.1000     -0.0022
##    140          0.4033          nan      0.1000     -0.0018
##    160          0.3656          nan      0.1000     -0.0005
##    180          0.3327          nan      0.1000     -0.0020
##    200          0.3076          nan      0.1000     -0.0009
##    220          0.2838          nan      0.1000     -0.0017
##    240          0.2652          nan      0.1000     -0.0011
##    250          0.2559          nan      0.1000     -0.0013
##
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1          1.2350          nan      0.1000      0.0266
##      2          1.1812          nan      0.1000      0.0219
##      3          1.1345          nan      0.1000      0.0236
##      4          1.0929          nan      0.1000      0.0143
##      5          1.0598          nan      0.1000      0.0090
##      6          1.0240          nan      0.1000      0.0089
##      7          0.9894          nan      0.1000      0.0130
##      8          0.9641          nan      0.1000      0.0107
##      9          0.9401          nan      0.1000      0.0056
##     10          0.9176          nan      0.1000      0.0070
##     20          0.7839          nan      0.1000     -0.0019
##     40          0.6550          nan      0.1000     -0.0025
##     60          0.5738          nan      0.1000     -0.0024
##     80          0.5006          nan      0.1000     -0.0053
##    100          0.4447          nan      0.1000     -0.0028
##    120          0.3920          nan      0.1000     -0.0006
##    140          0.3475          nan      0.1000     -0.0017
##    160          0.3103          nan      0.1000     -0.0011
##    180          0.2783          nan      0.1000     -0.0009
##    200          0.2510          nan      0.1000     -0.0012
##    220          0.2284          nan      0.1000     -0.0007
##    240          0.2067          nan      0.1000     -0.0011
##    250          0.1962          nan      0.1000     -0.0011
##
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1          1.2510          nan      0.1000      0.0191
##      2          1.2210          nan      0.1000      0.0137

```

##	3	1.1943	nan	0.1000	0.0104
##	4	1.1717	nan	0.1000	0.0107
##	5	1.1453	nan	0.1000	0.0087
##	6	1.1258	nan	0.1000	0.0070
##	7	1.1061	nan	0.1000	0.0076
##	8	1.0896	nan	0.1000	0.0068
##	9	1.0752	nan	0.1000	0.0037
##	10	1.0595	nan	0.1000	0.0056
##	20	0.9701	nan	0.1000	0.0010
##	40	0.8871	nan	0.1000	0.0002
##	60	0.8448	nan	0.1000	-0.0009
##	80	0.8090	nan	0.1000	0.0004
##	100	0.7911	nan	0.1000	-0.0017
##	120	0.7759	nan	0.1000	-0.0008
##	140	0.7639	nan	0.1000	-0.0024
##	160	0.7518	nan	0.1000	-0.0013
##	180	0.7409	nan	0.1000	-0.0006
##	200	0.7309	nan	0.1000	-0.0016
##	220	0.7201	nan	0.1000	-0.0014
##	240	0.7091	nan	0.1000	-0.0008
##	250	0.7045	nan	0.1000	-0.0010

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2384	nan	0.1000	0.0258
##	2	1.1992	nan	0.1000	0.0152
##	3	1.1586	nan	0.1000	0.0145
##	4	1.1215	nan	0.1000	0.0154
##	5	1.0929	nan	0.1000	0.0114
##	6	1.0684	nan	0.1000	0.0086
##	7	1.0449	nan	0.1000	0.0104
##	8	1.0216	nan	0.1000	0.0064
##	9	1.0070	nan	0.1000	0.0050
##	10	0.9879	nan	0.1000	0.0045
##	20	0.8836	nan	0.1000	0.0014
##	40	0.8008	nan	0.1000	-0.0025
##	60	0.7489	nan	0.1000	-0.0002
##	80	0.7111	nan	0.1000	-0.0012
##	100	0.6729	nan	0.1000	-0.0037
##	120	0.6465	nan	0.1000	-0.0011
##	140	0.6253	nan	0.1000	-0.0012
##	160	0.6048	nan	0.1000	-0.0015
##	180	0.5831	nan	0.1000	-0.0020
##	200	0.5620	nan	0.1000	-0.0017
##	220	0.5406	nan	0.1000	-0.0014
##	240	0.5215	nan	0.1000	-0.0006
##	250	0.5095	nan	0.1000	-0.0018

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2383	nan	0.1000	0.0242
##	2	1.1918	nan	0.1000	0.0222
##	3	1.1502	nan	0.1000	0.0187
##	4	1.1176	nan	0.1000	0.0147
##	5	1.0820	nan	0.1000	0.0146
##	6	1.0466	nan	0.1000	0.0136

##	7	1.0239	nan	0.1000	0.0101
##	8	1.0008	nan	0.1000	0.0076
##	9	0.9828	nan	0.1000	0.0041
##	10	0.9711	nan	0.1000	0.0008
##	20	0.8482	nan	0.1000	0.0001
##	40	0.7374	nan	0.1000	-0.0013
##	60	0.6762	nan	0.1000	-0.0011
##	80	0.6233	nan	0.1000	-0.0026
##	100	0.5785	nan	0.1000	-0.0026
##	120	0.5373	nan	0.1000	-0.0024
##	140	0.5071	nan	0.1000	-0.0031
##	160	0.4772	nan	0.1000	-0.0025
##	180	0.4509	nan	0.1000	-0.0035
##	200	0.4282	nan	0.1000	-0.0030
##	220	0.4023	nan	0.1000	-0.0011
##	240	0.3768	nan	0.1000	-0.0013
##	250	0.3658	nan	0.1000	-0.0014

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2315	nan	0.1000	0.0273
##	2	1.1757	nan	0.1000	0.0242
##	3	1.1340	nan	0.1000	0.0151
##	4	1.0925	nan	0.1000	0.0156
##	5	1.0545	nan	0.1000	0.0154
##	6	1.0185	nan	0.1000	0.0119
##	7	0.9911	nan	0.1000	0.0095
##	8	0.9608	nan	0.1000	0.0119
##	9	0.9436	nan	0.1000	0.0036
##	10	0.9284	nan	0.1000	0.0013
##	20	0.8061	nan	0.1000	-0.0008
##	40	0.6955	nan	0.1000	-0.0002
##	60	0.6128	nan	0.1000	-0.0030
##	80	0.5574	nan	0.1000	-0.0014
##	100	0.5137	nan	0.1000	-0.0039
##	120	0.4716	nan	0.1000	-0.0007
##	140	0.4367	nan	0.1000	-0.0035
##	160	0.3975	nan	0.1000	-0.0010
##	180	0.3649	nan	0.1000	-0.0014
##	200	0.3316	nan	0.1000	-0.0015
##	220	0.3098	nan	0.1000	-0.0020
##	240	0.2886	nan	0.1000	-0.0017
##	250	0.2786	nan	0.1000	-0.0006

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2282	nan	0.1000	0.0196
##	2	1.1689	nan	0.1000	0.0198
##	3	1.1241	nan	0.1000	0.0174
##	4	1.0802	nan	0.1000	0.0191
##	5	1.0435	nan	0.1000	0.0154
##	6	1.0146	nan	0.1000	0.0107
##	7	0.9850	nan	0.1000	0.0115
##	8	0.9579	nan	0.1000	0.0091
##	9	0.9303	nan	0.1000	0.0070
##	10	0.9111	nan	0.1000	0.0066

##	20	0.7767	nan	0.1000	-0.0007
##	40	0.6319	nan	0.1000	-0.0019
##	60	0.5513	nan	0.1000	-0.0034
##	80	0.4890	nan	0.1000	0.0008
##	100	0.4362	nan	0.1000	-0.0024
##	120	0.3901	nan	0.1000	-0.0036
##	140	0.3498	nan	0.1000	-0.0016
##	160	0.3145	nan	0.1000	-0.0027
##	180	0.2857	nan	0.1000	-0.0016
##	200	0.2580	nan	0.1000	-0.0019
##	220	0.2341	nan	0.1000	-0.0006
##	240	0.2138	nan	0.1000	-0.0004
##	250	0.2033	nan	0.1000	-0.0007

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2645	nan	0.1000	0.0157
##	2	1.2364	nan	0.1000	0.0131
##	3	1.2156	nan	0.1000	0.0121
##	4	1.1950	nan	0.1000	0.0090
##	5	1.1731	nan	0.1000	0.0098
##	6	1.1556	nan	0.1000	0.0068
##	7	1.1349	nan	0.1000	0.0079
##	8	1.1197	nan	0.1000	0.0051
##	9	1.1037	nan	0.1000	0.0057
##	10	1.0900	nan	0.1000	0.0047
##	20	0.9971	nan	0.1000	0.0011
##	40	0.9107	nan	0.1000	-0.0003
##	60	0.8606	nan	0.1000	-0.0001
##	80	0.8395	nan	0.1000	-0.0002
##	100	0.8179	nan	0.1000	-0.0014
##	120	0.8008	nan	0.1000	-0.0018
##	140	0.7871	nan	0.1000	-0.0023
##	160	0.7779	nan	0.1000	-0.0016
##	180	0.7695	nan	0.1000	-0.0024
##	200	0.7649	nan	0.1000	-0.0018
##	220	0.7576	nan	0.1000	-0.0009
##	240	0.7511	nan	0.1000	-0.0007
##	250	0.7480	nan	0.1000	-0.0010

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2528	nan	0.1000	0.0190
##	2	1.2115	nan	0.1000	0.0169
##	3	1.1734	nan	0.1000	0.0184
##	4	1.1469	nan	0.1000	0.0111
##	5	1.1183	nan	0.1000	0.0102
##	6	1.0956	nan	0.1000	0.0095
##	7	1.0773	nan	0.1000	0.0053
##	8	1.0534	nan	0.1000	0.0066
##	9	1.0405	nan	0.1000	0.0055
##	10	1.0254	nan	0.1000	0.0072
##	20	0.9236	nan	0.1000	0.0033
##	40	0.8285	nan	0.1000	-0.0008
##	60	0.7809	nan	0.1000	-0.0005
##	80	0.7504	nan	0.1000	-0.0010

##	100	0.7181	nan	0.1000	-0.0010
##	120	0.6923	nan	0.1000	-0.0010
##	140	0.6687	nan	0.1000	-0.0006
##	160	0.6448	nan	0.1000	-0.0009
##	180	0.6186	nan	0.1000	-0.0004
##	200	0.5966	nan	0.1000	-0.0019
##	220	0.5753	nan	0.1000	-0.0038
##	240	0.5576	nan	0.1000	-0.0011
##	250	0.5482	nan	0.1000	-0.0017

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2404	nan	0.1000	0.0215
##	2	1.1937	nan	0.1000	0.0198
##	3	1.1564	nan	0.1000	0.0157
##	4	1.1230	nan	0.1000	0.0134
##	5	1.0940	nan	0.1000	0.0119
##	6	1.0684	nan	0.1000	0.0083
##	7	1.0450	nan	0.1000	0.0065
##	8	1.0205	nan	0.1000	0.0082
##	9	1.0019	nan	0.1000	0.0047
##	10	0.9827	nan	0.1000	0.0055
##	20	0.8765	nan	0.1000	0.0003
##	40	0.7759	nan	0.1000	-0.0020
##	60	0.7128	nan	0.1000	-0.0003
##	80	0.6618	nan	0.1000	-0.0012
##	100	0.6221	nan	0.1000	-0.0014
##	120	0.5865	nan	0.1000	-0.0024
##	140	0.5529	nan	0.1000	-0.0022
##	160	0.5207	nan	0.1000	-0.0016
##	180	0.4889	nan	0.1000	-0.0031
##	200	0.4615	nan	0.1000	-0.0018
##	220	0.4413	nan	0.1000	-0.0026
##	240	0.4195	nan	0.1000	-0.0017
##	250	0.4093	nan	0.1000	-0.0020

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2359	nan	0.1000	0.0236
##	2	1.1913	nan	0.1000	0.0176
##	3	1.1455	nan	0.1000	0.0165
##	4	1.1082	nan	0.1000	0.0130
##	5	1.0712	nan	0.1000	0.0137
##	6	1.0418	nan	0.1000	0.0096
##	7	1.0106	nan	0.1000	0.0078
##	8	0.9868	nan	0.1000	0.0085
##	9	0.9684	nan	0.1000	0.0033
##	10	0.9544	nan	0.1000	-0.0005
##	20	0.8337	nan	0.1000	-0.0017
##	40	0.7173	nan	0.1000	-0.0006
##	60	0.6361	nan	0.1000	-0.0007
##	80	0.5732	nan	0.1000	-0.0026
##	100	0.5170	nan	0.1000	-0.0004
##	120	0.4732	nan	0.1000	-0.0018
##	140	0.4277	nan	0.1000	-0.0026
##	160	0.3951	nan	0.1000	-0.0014

##	180	0.3635	nan	0.1000	-0.0020
##	200	0.3343	nan	0.1000	-0.0010
##	220	0.3094	nan	0.1000	-0.0022
##	240	0.2868	nan	0.1000	-0.0016
##	250	0.2769	nan	0.1000	-0.0020

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2310	nan	0.1000	0.0287
##	2	1.1769	nan	0.1000	0.0168
##	3	1.1325	nan	0.1000	0.0155
##	4	1.0901	nan	0.1000	0.0174
##	5	1.0500	nan	0.1000	0.0172
##	6	1.0166	nan	0.1000	0.0126
##	7	0.9909	nan	0.1000	0.0091
##	8	0.9613	nan	0.1000	0.0106
##	9	0.9370	nan	0.1000	0.0070
##	10	0.9204	nan	0.1000	0.0018
##	20	0.7994	nan	0.1000	-0.0004
##	40	0.6625	nan	0.1000	-0.0028
##	60	0.5787	nan	0.1000	-0.0038
##	80	0.5174	nan	0.1000	-0.0002
##	100	0.4627	nan	0.1000	-0.0005
##	120	0.4153	nan	0.1000	-0.0032
##	140	0.3733	nan	0.1000	-0.0012
##	160	0.3363	nan	0.1000	-0.0014
##	180	0.3013	nan	0.1000	-0.0006
##	200	0.2713	nan	0.1000	-0.0024
##	220	0.2460	nan	0.1000	-0.0010
##	240	0.2246	nan	0.1000	-0.0017
##	250	0.2148	nan	0.1000	-0.0005

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2602	nan	0.1000	0.0193
##	2	1.2268	nan	0.1000	0.0131
##	3	1.2003	nan	0.1000	0.0129
##	4	1.1752	nan	0.1000	0.0088
##	5	1.1580	nan	0.1000	0.0031
##	6	1.1401	nan	0.1000	0.0085
##	7	1.1236	nan	0.1000	0.0048
##	8	1.1079	nan	0.1000	0.0062
##	9	1.0921	nan	0.1000	0.0050
##	10	1.0770	nan	0.1000	0.0064
##	20	0.9892	nan	0.1000	0.0020
##	40	0.9042	nan	0.1000	0.0012
##	60	0.8595	nan	0.1000	-0.0010
##	80	0.8310	nan	0.1000	-0.0005
##	100	0.8079	nan	0.1000	-0.0011
##	120	0.7961	nan	0.1000	-0.0022
##	140	0.7814	nan	0.1000	-0.0005
##	160	0.7718	nan	0.1000	-0.0011
##	180	0.7655	nan	0.1000	-0.0007
##	200	0.7558	nan	0.1000	-0.0006
##	220	0.7410	nan	0.1000	-0.0015
##	240	0.7334	nan	0.1000	-0.0025

```

##      250      0.7298      nan      0.1000     -0.0021
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2478      nan      0.1000     0.0231
##      2      1.2103      nan      0.1000     0.0160
##      3      1.1753      nan      0.1000     0.0153
##      4      1.1405      nan      0.1000     0.0156
##      5      1.1070      nan      0.1000     0.0094
##      6      1.0825      nan      0.1000     0.0080
##      7      1.0618      nan      0.1000     0.0066
##      8      1.0394      nan      0.1000     0.0103
##      9      1.0207      nan      0.1000     0.0072
##     10      1.0030      nan      0.1000     0.0067
##     20      0.9063      nan      0.1000     0.0025
##     40      0.8202      nan      0.1000    -0.0011
##     60      0.7741      nan      0.1000    -0.0025
##     80      0.7425      nan      0.1000    -0.0018
##    100      0.7089      nan      0.1000    -0.0019
##    120      0.6829      nan      0.1000    -0.0009
##    140      0.6588      nan      0.1000    -0.0022
##    160      0.6326      nan      0.1000     0.0005
##    180      0.6057      nan      0.1000    -0.0022
##    200      0.5867      nan      0.1000    -0.0016
##    220      0.5688      nan      0.1000    -0.0021
##    240      0.5555      nan      0.1000    -0.0030
##    250      0.5468      nan      0.1000    -0.0014
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2338      nan      0.1000     0.0259
##      2      1.1915      nan      0.1000     0.0222
##      3      1.1533      nan      0.1000     0.0167
##      4      1.1132      nan      0.1000     0.0158
##      5      1.0799      nan      0.1000     0.0149
##      6      1.0516      nan      0.1000     0.0098
##      7      1.0299      nan      0.1000     0.0074
##      8      1.0074      nan      0.1000     0.0081
##      9      0.9913      nan      0.1000     0.0014
##     10      0.9715      nan      0.1000     0.0073
##     20      0.8587      nan      0.1000     0.0010
##     40      0.7675      nan      0.1000    -0.0040
##     60      0.7088      nan      0.1000    -0.0031
##     80      0.6622      nan      0.1000    -0.0009
##    100      0.6171      nan      0.1000    -0.0023
##    120      0.5758      nan      0.1000    -0.0016
##    140      0.5415      nan      0.1000    -0.0032
##    160      0.5134      nan      0.1000    -0.0010
##    180      0.4882      nan      0.1000    -0.0031
##    200      0.4616      nan      0.1000    -0.0012
##    220      0.4396      nan      0.1000    -0.0017
##    240      0.4173      nan      0.1000    -0.0020
##    250      0.4064      nan      0.1000    -0.0011
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2228      nan      0.1000     0.0315

```

##	2	1.1801	nan	0.1000	0.0171
##	3	1.1406	nan	0.1000	0.0182
##	4	1.1008	nan	0.1000	0.0141
##	5	1.0661	nan	0.1000	0.0119
##	6	1.0367	nan	0.1000	0.0070
##	7	1.0106	nan	0.1000	0.0085
##	8	0.9851	nan	0.1000	0.0089
##	9	0.9654	nan	0.1000	0.0057
##	10	0.9494	nan	0.1000	0.0032
##	20	0.8354	nan	0.1000	-0.0014
##	40	0.7107	nan	0.1000	-0.0023
##	60	0.6374	nan	0.1000	-0.0021
##	80	0.5801	nan	0.1000	-0.0027
##	100	0.5288	nan	0.1000	-0.0024
##	120	0.4878	nan	0.1000	-0.0042
##	140	0.4469	nan	0.1000	-0.0017
##	160	0.4100	nan	0.1000	-0.0016
##	180	0.3746	nan	0.1000	-0.0014
##	200	0.3472	nan	0.1000	-0.0016
##	220	0.3255	nan	0.1000	-0.0014
##	240	0.3061	nan	0.1000	-0.0011
##	250	0.2967	nan	0.1000	-0.0009

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2321	nan	0.1000	0.0269
##	2	1.1768	nan	0.1000	0.0201
##	3	1.1303	nan	0.1000	0.0130
##	4	1.0883	nan	0.1000	0.0155
##	5	1.0491	nan	0.1000	0.0129
##	6	1.0132	nan	0.1000	0.0143
##	7	0.9862	nan	0.1000	0.0080
##	8	0.9600	nan	0.1000	0.0074
##	9	0.9407	nan	0.1000	0.0045
##	10	0.9223	nan	0.1000	0.0009
##	20	0.8029	nan	0.1000	0.0000
##	40	0.6703	nan	0.1000	0.0008
##	60	0.5835	nan	0.1000	-0.0021
##	80	0.5191	nan	0.1000	-0.0024
##	100	0.4646	nan	0.1000	-0.0032
##	120	0.4182	nan	0.1000	-0.0035
##	140	0.3732	nan	0.1000	-0.0021
##	160	0.3379	nan	0.1000	-0.0029
##	180	0.3057	nan	0.1000	-0.0019
##	200	0.2765	nan	0.1000	-0.0005
##	220	0.2512	nan	0.1000	-0.0013
##	240	0.2279	nan	0.1000	-0.0012
##	250	0.2193	nan	0.1000	-0.0009

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2567	nan	0.1000	0.0165
##	2	1.2280	nan	0.1000	0.0118
##	3	1.1951	nan	0.1000	0.0151
##	4	1.1709	nan	0.1000	0.0097
##	5	1.1419	nan	0.1000	0.0101

##	6	1.1238	nan	0.1000	0.0056
##	7	1.0997	nan	0.1000	0.0077
##	8	1.0840	nan	0.1000	0.0072
##	9	1.0685	nan	0.1000	0.0071
##	10	1.0537	nan	0.1000	0.0038
##	20	0.9566	nan	0.1000	0.0020
##	40	0.8715	nan	0.1000	0.0001
##	60	0.8263	nan	0.1000	-0.0004
##	80	0.8025	nan	0.1000	-0.0008
##	100	0.7823	nan	0.1000	-0.0005
##	120	0.7676	nan	0.1000	-0.0018
##	140	0.7544	nan	0.1000	-0.0007
##	160	0.7435	nan	0.1000	-0.0034
##	180	0.7297	nan	0.1000	-0.0013
##	200	0.7230	nan	0.1000	-0.0012
##	220	0.7171	nan	0.1000	-0.0006
##	240	0.7102	nan	0.1000	-0.0006
##	250	0.7073	nan	0.1000	-0.0006

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2416	nan	0.1000	0.0222
##	2	1.2025	nan	0.1000	0.0172
##	3	1.1630	nan	0.1000	0.0140
##	4	1.1276	nan	0.1000	0.0146
##	5	1.1014	nan	0.1000	0.0111
##	6	1.0769	nan	0.1000	0.0112
##	7	1.0549	nan	0.1000	0.0065
##	8	1.0343	nan	0.1000	0.0097
##	9	1.0190	nan	0.1000	0.0050
##	10	1.0015	nan	0.1000	0.0080
##	20	0.8898	nan	0.1000	0.0002
##	40	0.7906	nan	0.1000	-0.0017
##	60	0.7403	nan	0.1000	-0.0016
##	80	0.7062	nan	0.1000	-0.0012
##	100	0.6708	nan	0.1000	-0.0026
##	120	0.6445	nan	0.1000	-0.0011
##	140	0.6153	nan	0.1000	-0.0013
##	160	0.5956	nan	0.1000	-0.0024
##	180	0.5773	nan	0.1000	-0.0012
##	200	0.5534	nan	0.1000	-0.0011
##	220	0.5336	nan	0.1000	-0.0026
##	240	0.5157	nan	0.1000	-0.0018
##	250	0.5066	nan	0.1000	-0.0035

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2448	nan	0.1000	0.0245
##	2	1.1933	nan	0.1000	0.0231
##	3	1.1462	nan	0.1000	0.0182
##	4	1.1078	nan	0.1000	0.0147
##	5	1.0771	nan	0.1000	0.0147
##	6	1.0451	nan	0.1000	0.0142
##	7	1.0210	nan	0.1000	0.0073
##	8	0.9972	nan	0.1000	0.0085
##	9	0.9739	nan	0.1000	0.0086

##	10	0.9577	nan	0.1000	0.0063
##	20	0.8391	nan	0.1000	-0.0003
##	40	0.7380	nan	0.1000	-0.0027
##	60	0.6782	nan	0.1000	-0.0005
##	80	0.6214	nan	0.1000	-0.0013
##	100	0.5762	nan	0.1000	-0.0010
##	120	0.5433	nan	0.1000	-0.0017
##	140	0.5084	nan	0.1000	-0.0016
##	160	0.4850	nan	0.1000	-0.0014
##	180	0.4582	nan	0.1000	-0.0013
##	200	0.4276	nan	0.1000	-0.0016
##	220	0.4034	nan	0.1000	-0.0022
##	240	0.3815	nan	0.1000	-0.0011
##	250	0.3703	nan	0.1000	-0.0010

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2244	nan	0.1000	0.0252
##	2	1.1763	nan	0.1000	0.0208
##	3	1.1237	nan	0.1000	0.0201
##	4	1.0824	nan	0.1000	0.0162
##	5	1.0497	nan	0.1000	0.0137
##	6	1.0217	nan	0.1000	0.0100
##	7	0.9972	nan	0.1000	0.0071
##	8	0.9662	nan	0.1000	0.0098
##	9	0.9471	nan	0.1000	0.0056
##	10	0.9314	nan	0.1000	0.0039
##	20	0.8056	nan	0.1000	0.0006
##	40	0.6975	nan	0.1000	-0.0029
##	60	0.6132	nan	0.1000	-0.0013
##	80	0.5500	nan	0.1000	-0.0040
##	100	0.4989	nan	0.1000	-0.0007
##	120	0.4612	nan	0.1000	-0.0011
##	140	0.4182	nan	0.1000	-0.0018
##	160	0.3815	nan	0.1000	-0.0023
##	180	0.3492	nan	0.1000	-0.0022
##	200	0.3245	nan	0.1000	-0.0012
##	220	0.3013	nan	0.1000	-0.0006
##	240	0.2759	nan	0.1000	-0.0011
##	250	0.2642	nan	0.1000	-0.0010

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2301	nan	0.1000	0.0267
##	2	1.1667	nan	0.1000	0.0295
##	3	1.1191	nan	0.1000	0.0196
##	4	1.0742	nan	0.1000	0.0148
##	5	1.0386	nan	0.1000	0.0159
##	6	1.0070	nan	0.1000	0.0103
##	7	0.9838	nan	0.1000	0.0067
##	8	0.9553	nan	0.1000	0.0090
##	9	0.9369	nan	0.1000	0.0026
##	10	0.9127	nan	0.1000	0.0085
##	20	0.7862	nan	0.1000	-0.0009
##	40	0.6542	nan	0.1000	-0.0047
##	60	0.5683	nan	0.1000	-0.0034

##	80	0.5043	nan	0.1000	-0.0029
##	100	0.4424	nan	0.1000	-0.0014
##	120	0.3935	nan	0.1000	-0.0018
##	140	0.3550	nan	0.1000	-0.0026
##	160	0.3219	nan	0.1000	-0.0025
##	180	0.2887	nan	0.1000	-0.0011
##	200	0.2576	nan	0.1000	-0.0017
##	220	0.2326	nan	0.1000	-0.0016
##	240	0.2122	nan	0.1000	-0.0015
##	250	0.2033	nan	0.1000	-0.0012

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2628	nan	0.1000	0.0130
##	2	1.2338	nan	0.1000	0.0164
##	3	1.2042	nan	0.1000	0.0121
##	4	1.1756	nan	0.1000	0.0123
##	5	1.1537	nan	0.1000	0.0106
##	6	1.1301	nan	0.1000	0.0061
##	7	1.1138	nan	0.1000	0.0059
##	8	1.0958	nan	0.1000	0.0052
##	9	1.0789	nan	0.1000	0.0069
##	10	1.0659	nan	0.1000	0.0048
##	20	0.9643	nan	0.1000	0.0014
##	40	0.8769	nan	0.1000	-0.0012
##	60	0.8247	nan	0.1000	-0.0007
##	80	0.7960	nan	0.1000	-0.0003
##	100	0.7785	nan	0.1000	-0.0013
##	120	0.7633	nan	0.1000	-0.0013
##	140	0.7565	nan	0.1000	-0.0015
##	160	0.7458	nan	0.1000	-0.0003
##	180	0.7380	nan	0.1000	-0.0009
##	200	0.7273	nan	0.1000	-0.0026
##	220	0.7147	nan	0.1000	-0.0013
##	240	0.7051	nan	0.1000	-0.0006
##	250	0.7024	nan	0.1000	-0.0020

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2407	nan	0.1000	0.0216
##	2	1.1960	nan	0.1000	0.0166
##	3	1.1645	nan	0.1000	0.0152
##	4	1.1312	nan	0.1000	0.0174
##	5	1.1059	nan	0.1000	0.0104
##	6	1.0824	nan	0.1000	0.0112
##	7	1.0577	nan	0.1000	0.0096
##	8	1.0383	nan	0.1000	0.0073
##	9	1.0201	nan	0.1000	0.0071
##	10	1.0055	nan	0.1000	0.0065
##	20	0.8928	nan	0.1000	0.0013
##	40	0.8030	nan	0.1000	-0.0013
##	60	0.7482	nan	0.1000	-0.0008
##	80	0.7077	nan	0.1000	-0.0017
##	100	0.6796	nan	0.1000	-0.0013
##	120	0.6504	nan	0.1000	-0.0012
##	140	0.6143	nan	0.1000	-0.0014

##	160	0.5929	nan	0.1000	-0.0031
##	180	0.5699	nan	0.1000	-0.0013
##	200	0.5480	nan	0.1000	-0.0010
##	220	0.5297	nan	0.1000	-0.0020
##	240	0.5064	nan	0.1000	-0.0018
##	250	0.4957	nan	0.1000	-0.0009

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2372	nan	0.1000	0.0272
##	2	1.1950	nan	0.1000	0.0195
##	3	1.1523	nan	0.1000	0.0145
##	4	1.1172	nan	0.1000	0.0134
##	5	1.0825	nan	0.1000	0.0138
##	6	1.0477	nan	0.1000	0.0125
##	7	1.0230	nan	0.1000	0.0076
##	8	1.0037	nan	0.1000	0.0041
##	9	0.9856	nan	0.1000	0.0054
##	10	0.9683	nan	0.1000	0.0051
##	20	0.8529	nan	0.1000	-0.0005
##	40	0.7429	nan	0.1000	-0.0021
##	60	0.6781	nan	0.1000	-0.0030
##	80	0.6256	nan	0.1000	-0.0005
##	100	0.5865	nan	0.1000	-0.0013
##	120	0.5447	nan	0.1000	-0.0023
##	140	0.5131	nan	0.1000	-0.0035
##	160	0.4825	nan	0.1000	-0.0011
##	180	0.4514	nan	0.1000	-0.0011
##	200	0.4256	nan	0.1000	-0.0016
##	220	0.3976	nan	0.1000	-0.0025
##	240	0.3727	nan	0.1000	-0.0017
##	250	0.3647	nan	0.1000	-0.0017

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2344	nan	0.1000	0.0260
##	2	1.1905	nan	0.1000	0.0173
##	3	1.1474	nan	0.1000	0.0155
##	4	1.1044	nan	0.1000	0.0185
##	5	1.0610	nan	0.1000	0.0157
##	6	1.0307	nan	0.1000	0.0096
##	7	0.9998	nan	0.1000	0.0107
##	8	0.9830	nan	0.1000	0.0047
##	9	0.9616	nan	0.1000	0.0052
##	10	0.9407	nan	0.1000	0.0054
##	20	0.8156	nan	0.1000	-0.0000
##	40	0.6932	nan	0.1000	-0.0042
##	60	0.6083	nan	0.1000	-0.0016
##	80	0.5395	nan	0.1000	0.0000
##	100	0.4821	nan	0.1000	-0.0022
##	120	0.4337	nan	0.1000	-0.0017
##	140	0.3965	nan	0.1000	-0.0018
##	160	0.3656	nan	0.1000	-0.0013
##	180	0.3362	nan	0.1000	-0.0017
##	200	0.3088	nan	0.1000	-0.0012
##	220	0.2843	nan	0.1000	-0.0018

```

##      240      0.2593      nan      0.1000     -0.0005
##      250      0.2487      nan      0.1000     -0.0009
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2357      nan      0.1000     0.0208
##      2      1.1785      nan      0.1000     0.0235
##      3      1.1240      nan      0.1000     0.0210
##      4      1.0826      nan      0.1000     0.0155
##      5      1.0397      nan      0.1000     0.0144
##      6      1.0074      nan      0.1000     0.0123
##      7      0.9770      nan      0.1000     0.0098
##      8      0.9485      nan      0.1000     0.0076
##      9      0.9323      nan      0.1000     0.0006
##     10      0.9136      nan      0.1000     0.0050
##     20      0.7866      nan      0.1000     0.0000
##     40      0.6430      nan      0.1000    -0.0005
##     60      0.5669      nan      0.1000    -0.0027
##     80      0.5017      nan      0.1000    -0.0026
##    100      0.4395      nan      0.1000    -0.0030
##    120      0.4011      nan      0.1000    -0.0042
##    140      0.3572      nan      0.1000    -0.0013
##    160      0.3226      nan      0.1000    -0.0024
##    180      0.2865      nan      0.1000    -0.0013
##    200      0.2585      nan      0.1000    -0.0007
##    220      0.2326      nan      0.1000    -0.0013
##    240      0.2091      nan      0.1000    -0.0007
##    250      0.1979      nan      0.1000    -0.0010
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2554      nan      0.1000     0.0179
##      2      1.2312      nan      0.1000     0.0067
##      3      1.1996      nan      0.1000     0.0129
##      4      1.1760      nan      0.1000     0.0098
##      5      1.1492      nan      0.1000     0.0109
##      6      1.1281      nan      0.1000     0.0083
##      7      1.1054      nan      0.1000     0.0070
##      8      1.0886      nan      0.1000     0.0067
##      9      1.0759      nan      0.1000     0.0050
##     10      1.0598      nan      0.1000     0.0037
##     20      0.9650      nan      0.1000    -0.0004
##     40      0.8817      nan      0.1000     0.0003
##     60      0.8422      nan      0.1000    -0.0011
##     80      0.8097      nan      0.1000    -0.0013
##    100      0.7894      nan      0.1000    -0.0024
##    120      0.7716      nan      0.1000    -0.0017
##    140      0.7594      nan      0.1000    -0.0009
##    160      0.7498      nan      0.1000    -0.0018
##    180      0.7425      nan      0.1000    -0.0019
##    200      0.7337      nan      0.1000    -0.0025
##    220      0.7248      nan      0.1000    -0.0017
##    240      0.7171      nan      0.1000    -0.0023
##    250      0.7137      nan      0.1000    -0.0005
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve

```

##	1	1.2418	nan	0.1000	0.0206
##	2	1.1983	nan	0.1000	0.0213
##	3	1.1619	nan	0.1000	0.0138
##	4	1.1265	nan	0.1000	0.0140
##	5	1.1043	nan	0.1000	0.0104
##	6	1.0785	nan	0.1000	0.0092
##	7	1.0591	nan	0.1000	0.0059
##	8	1.0382	nan	0.1000	0.0091
##	9	1.0217	nan	0.1000	0.0044
##	10	1.0035	nan	0.1000	0.0081
##	20	0.9014	nan	0.1000	-0.0003
##	40	0.8074	nan	0.1000	-0.0020
##	60	0.7499	nan	0.1000	-0.0010
##	80	0.7175	nan	0.1000	-0.0009
##	100	0.6831	nan	0.1000	-0.0009
##	120	0.6515	nan	0.1000	-0.0002
##	140	0.6258	nan	0.1000	-0.0018
##	160	0.6039	nan	0.1000	-0.0014
##	180	0.5806	nan	0.1000	-0.0012
##	200	0.5586	nan	0.1000	-0.0005
##	220	0.5398	nan	0.1000	-0.0012
##	240	0.5179	nan	0.1000	-0.0010
##	250	0.5106	nan	0.1000	-0.0014

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2380	nan	0.1000	0.0225
##	2	1.1859	nan	0.1000	0.0223
##	3	1.1497	nan	0.1000	0.0130
##	4	1.1121	nan	0.1000	0.0162
##	5	1.0793	nan	0.1000	0.0152
##	6	1.0522	nan	0.1000	0.0104
##	7	1.0229	nan	0.1000	0.0085
##	8	1.0018	nan	0.1000	0.0044
##	9	0.9768	nan	0.1000	0.0073
##	10	0.9580	nan	0.1000	0.0059
##	20	0.8531	nan	0.1000	0.0004
##	40	0.7401	nan	0.1000	-0.0020
##	60	0.6801	nan	0.1000	-0.0011
##	80	0.6247	nan	0.1000	-0.0014
##	100	0.5884	nan	0.1000	-0.0029
##	120	0.5501	nan	0.1000	-0.0011
##	140	0.5099	nan	0.1000	-0.0013
##	160	0.4813	nan	0.1000	-0.0004
##	180	0.4585	nan	0.1000	-0.0029
##	200	0.4298	nan	0.1000	-0.0013
##	220	0.4078	nan	0.1000	-0.0017
##	240	0.3835	nan	0.1000	-0.0010
##	250	0.3732	nan	0.1000	-0.0017

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2261	nan	0.1000	0.0287
##	2	1.1696	nan	0.1000	0.0254
##	3	1.1195	nan	0.1000	0.0227
##	4	1.0733	nan	0.1000	0.0146

##	5	1.0357	nan	0.1000	0.0153
##	6	1.0061	nan	0.1000	0.0112
##	7	0.9851	nan	0.1000	0.0063
##	8	0.9601	nan	0.1000	0.0067
##	9	0.9374	nan	0.1000	0.0046
##	10	0.9173	nan	0.1000	0.0059
##	20	0.7997	nan	0.1000	-0.0005
##	40	0.6946	nan	0.1000	-0.0052
##	60	0.6255	nan	0.1000	-0.0041
##	80	0.5635	nan	0.1000	-0.0018
##	100	0.5175	nan	0.1000	-0.0015
##	120	0.4696	nan	0.1000	-0.0024
##	140	0.4344	nan	0.1000	-0.0047
##	160	0.3960	nan	0.1000	-0.0015
##	180	0.3664	nan	0.1000	-0.0004
##	200	0.3424	nan	0.1000	-0.0016
##	220	0.3162	nan	0.1000	-0.0016
##	240	0.2911	nan	0.1000	-0.0026
##	250	0.2821	nan	0.1000	-0.0018

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2211	nan	0.1000	0.0322
##	2	1.1675	nan	0.1000	0.0206
##	3	1.1122	nan	0.1000	0.0175
##	4	1.0700	nan	0.1000	0.0171
##	5	1.0340	nan	0.1000	0.0162
##	6	1.0022	nan	0.1000	0.0117
##	7	0.9723	nan	0.1000	0.0081
##	8	0.9464	nan	0.1000	0.0058
##	9	0.9257	nan	0.1000	0.0060
##	10	0.9048	nan	0.1000	0.0045
##	20	0.7776	nan	0.1000	0.0009
##	40	0.6385	nan	0.1000	0.0013
##	60	0.5643	nan	0.1000	-0.0016
##	80	0.4984	nan	0.1000	-0.0012
##	100	0.4448	nan	0.1000	-0.0024
##	120	0.3957	nan	0.1000	-0.0022
##	140	0.3605	nan	0.1000	-0.0024
##	160	0.3202	nan	0.1000	-0.0018
##	180	0.2871	nan	0.1000	-0.0018
##	200	0.2594	nan	0.1000	-0.0011
##	220	0.2348	nan	0.1000	-0.0015
##	240	0.2156	nan	0.1000	-0.0013
##	250	0.2069	nan	0.1000	-0.0007

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2575	nan	0.1000	0.0183
##	2	1.2321	nan	0.1000	0.0100
##	3	1.1976	nan	0.1000	0.0114
##	4	1.1739	nan	0.1000	0.0126
##	5	1.1528	nan	0.1000	0.0098
##	6	1.1337	nan	0.1000	0.0073
##	7	1.1194	nan	0.1000	0.0064
##	8	1.1017	nan	0.1000	0.0070

##	9	1.0880	nan	0.1000	0.0054
##	10	1.0730	nan	0.1000	0.0063
##	20	0.9744	nan	0.1000	0.0018
##	40	0.8852	nan	0.1000	-0.0003
##	60	0.8513	nan	0.1000	-0.0006
##	80	0.8268	nan	0.1000	-0.0015
##	100	0.8012	nan	0.1000	-0.0014
##	120	0.7856	nan	0.1000	-0.0012
##	140	0.7757	nan	0.1000	-0.0015
##	160	0.7639	nan	0.1000	-0.0008
##	180	0.7557	nan	0.1000	-0.0006
##	200	0.7471	nan	0.1000	-0.0020
##	220	0.7337	nan	0.1000	-0.0021
##	240	0.7252	nan	0.1000	-0.0005
##	250	0.7251	nan	0.1000	-0.0008

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2444	nan	0.1000	0.0187
##	2	1.2105	nan	0.1000	0.0158
##	3	1.1704	nan	0.1000	0.0163
##	4	1.1399	nan	0.1000	0.0141
##	5	1.1129	nan	0.1000	0.0112
##	6	1.0878	nan	0.1000	0.0117
##	7	1.0676	nan	0.1000	0.0065
##	8	1.0483	nan	0.1000	0.0081
##	9	1.0271	nan	0.1000	0.0047
##	10	1.0098	nan	0.1000	0.0045
##	20	0.9060	nan	0.1000	0.0014
##	40	0.8030	nan	0.1000	0.0004
##	60	0.7535	nan	0.1000	-0.0036
##	80	0.7195	nan	0.1000	-0.0022
##	100	0.6921	nan	0.1000	-0.0022
##	120	0.6672	nan	0.1000	-0.0019
##	140	0.6380	nan	0.1000	-0.0025
##	160	0.6112	nan	0.1000	-0.0011
##	180	0.5934	nan	0.1000	-0.0023
##	200	0.5745	nan	0.1000	-0.0010
##	220	0.5511	nan	0.1000	0.0001
##	240	0.5371	nan	0.1000	-0.0024
##	250	0.5291	nan	0.1000	-0.0013

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2356	nan	0.1000	0.0227
##	2	1.1885	nan	0.1000	0.0151
##	3	1.1496	nan	0.1000	0.0142
##	4	1.1104	nan	0.1000	0.0144
##	5	1.0825	nan	0.1000	0.0102
##	6	1.0533	nan	0.1000	0.0113
##	7	1.0322	nan	0.1000	0.0056
##	8	1.0075	nan	0.1000	0.0079
##	9	0.9836	nan	0.1000	0.0072
##	10	0.9670	nan	0.1000	0.0037
##	20	0.8532	nan	0.1000	0.0012
##	40	0.7490	nan	0.1000	-0.0016

##	60	0.6937	nan	0.1000	-0.0034
##	80	0.6471	nan	0.1000	-0.0027
##	100	0.6042	nan	0.1000	-0.0021
##	120	0.5729	nan	0.1000	-0.0032
##	140	0.5367	nan	0.1000	-0.0008
##	160	0.5035	nan	0.1000	-0.0031
##	180	0.4709	nan	0.1000	-0.0009
##	200	0.4399	nan	0.1000	-0.0005
##	220	0.4199	nan	0.1000	-0.0012
##	240	0.3970	nan	0.1000	-0.0015
##	250	0.3893	nan	0.1000	-0.0018

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2291	nan	0.1000	0.0309
##	2	1.1749	nan	0.1000	0.0209
##	3	1.1351	nan	0.1000	0.0158
##	4	1.0911	nan	0.1000	0.0159
##	5	1.0553	nan	0.1000	0.0172
##	6	1.0287	nan	0.1000	0.0120
##	7	1.0041	nan	0.1000	0.0065
##	8	0.9809	nan	0.1000	0.0080
##	9	0.9611	nan	0.1000	0.0064
##	10	0.9440	nan	0.1000	0.0043
##	20	0.8248	nan	0.1000	0.0010
##	40	0.7012	nan	0.1000	-0.0019
##	60	0.6302	nan	0.1000	-0.0013
##	80	0.5585	nan	0.1000	-0.0003
##	100	0.5061	nan	0.1000	-0.0010
##	120	0.4671	nan	0.1000	-0.0013
##	140	0.4311	nan	0.1000	-0.0019
##	160	0.3971	nan	0.1000	-0.0016
##	180	0.3658	nan	0.1000	-0.0015
##	200	0.3387	nan	0.1000	-0.0010
##	220	0.3151	nan	0.1000	-0.0018
##	240	0.2912	nan	0.1000	-0.0010
##	250	0.2818	nan	0.1000	-0.0006

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2209	nan	0.1000	0.0308
##	2	1.1659	nan	0.1000	0.0202
##	3	1.1219	nan	0.1000	0.0164
##	4	1.0855	nan	0.1000	0.0144
##	5	1.0482	nan	0.1000	0.0110
##	6	1.0221	nan	0.1000	0.0084
##	7	0.9958	nan	0.1000	0.0071
##	8	0.9741	nan	0.1000	0.0034
##	9	0.9484	nan	0.1000	0.0062
##	10	0.9258	nan	0.1000	0.0055
##	20	0.7852	nan	0.1000	0.0005
##	40	0.6489	nan	0.1000	-0.0017
##	60	0.5720	nan	0.1000	-0.0029
##	80	0.5134	nan	0.1000	-0.0011
##	100	0.4550	nan	0.1000	-0.0022
##	120	0.4077	nan	0.1000	-0.0013

##	140	0.3657	nan	0.1000	-0.0007
##	160	0.3256	nan	0.1000	-0.0004
##	180	0.2950	nan	0.1000	-0.0014
##	200	0.2671	nan	0.1000	-0.0011
##	220	0.2449	nan	0.1000	-0.0012
##	240	0.2199	nan	0.1000	-0.0008
##	250	0.2091	nan	0.1000	-0.0013

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2497	nan	0.1000	0.0164
##	2	1.2184	nan	0.1000	0.0131
##	3	1.1921	nan	0.1000	0.0117
##	4	1.1713	nan	0.1000	0.0088
##	5	1.1476	nan	0.1000	0.0093
##	6	1.1306	nan	0.1000	0.0079
##	7	1.1130	nan	0.1000	0.0066
##	8	1.0952	nan	0.1000	0.0058
##	9	1.0810	nan	0.1000	0.0065
##	10	1.0661	nan	0.1000	0.0051
##	20	0.9782	nan	0.1000	0.0037
##	40	0.8916	nan	0.1000	0.0015
##	60	0.8474	nan	0.1000	-0.0004
##	80	0.8220	nan	0.1000	0.0003
##	100	0.8012	nan	0.1000	-0.0011
##	120	0.7865	nan	0.1000	-0.0018
##	140	0.7711	nan	0.1000	-0.0000
##	160	0.7597	nan	0.1000	-0.0015
##	180	0.7486	nan	0.1000	-0.0011
##	200	0.7366	nan	0.1000	-0.0004
##	220	0.7271	nan	0.1000	-0.0008
##	240	0.7171	nan	0.1000	-0.0015
##	250	0.7145	nan	0.1000	-0.0019

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2427	nan	0.1000	0.0206
##	2	1.2073	nan	0.1000	0.0177
##	3	1.1732	nan	0.1000	0.0144
##	4	1.1374	nan	0.1000	0.0163
##	5	1.1082	nan	0.1000	0.0147
##	6	1.0849	nan	0.1000	0.0094
##	7	1.0623	nan	0.1000	0.0090
##	8	1.0427	nan	0.1000	0.0070
##	9	1.0272	nan	0.1000	0.0056
##	10	1.0127	nan	0.1000	0.0041
##	20	0.9071	nan	0.1000	-0.0004
##	40	0.8221	nan	0.1000	-0.0012
##	60	0.7667	nan	0.1000	-0.0019
##	80	0.7267	nan	0.1000	-0.0006
##	100	0.6929	nan	0.1000	-0.0006
##	120	0.6640	nan	0.1000	-0.0019
##	140	0.6418	nan	0.1000	-0.0026
##	160	0.6156	nan	0.1000	-0.0013
##	180	0.5926	nan	0.1000	-0.0005
##	200	0.5709	nan	0.1000	-0.0022

```

##      220      0.5520      nan      0.1000     -0.0011
##      240      0.5352      nan      0.1000     -0.0020
##      250      0.5254      nan      0.1000     -0.0011
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2315      nan      0.1000     0.0291
##      2      1.1899      nan      0.1000     0.0169
##      3      1.1507      nan      0.1000     0.0151
##      4      1.1138      nan      0.1000     0.0150
##      5      1.0807      nan      0.1000     0.0110
##      6      1.0540      nan      0.1000     0.0098
##      7      1.0286      nan      0.1000     0.0081
##      8      1.0089      nan      0.1000     0.0059
##      9      0.9914      nan      0.1000     0.0043
##     10      0.9714      nan      0.1000     0.0048
##     20      0.8590      nan      0.1000     0.0024
##     40      0.7589      nan      0.1000     0.0005
##     60      0.6881      nan      0.1000    -0.0014
##     80      0.6316      nan      0.1000    -0.0021
##    100      0.5897      nan      0.1000    -0.0023
##    120      0.5508      nan      0.1000    -0.0014
##    140      0.5253      nan      0.1000    -0.0029
##    160      0.4877      nan      0.1000    -0.0016
##    180      0.4584      nan      0.1000    -0.0012
##    200      0.4360      nan      0.1000    -0.0036
##    220      0.4069      nan      0.1000    -0.0014
##    240      0.3856      nan      0.1000    -0.0014
##    250      0.3760      nan      0.1000    -0.0009
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2258      nan      0.1000     0.0294
##      2      1.1743      nan      0.1000     0.0228
##      3      1.1312      nan      0.1000     0.0151
##      4      1.0929      nan      0.1000     0.0161
##      5      1.0578      nan      0.1000     0.0147
##      6      1.0245      nan      0.1000     0.0126
##      7      1.0019      nan      0.1000     0.0063
##      8      0.9797      nan      0.1000     0.0062
##      9      0.9594      nan      0.1000     0.0055
##     10      0.9402      nan      0.1000     0.0081
##     20      0.8152      nan      0.1000     0.0004
##     40      0.7050      nan      0.1000    -0.0006
##     60      0.6359      nan      0.1000    -0.0013
##     80      0.5674      nan      0.1000    -0.0017
##    100      0.5113      nan      0.1000    -0.0024
##    120      0.4642      nan      0.1000    -0.0017
##    140      0.4307      nan      0.1000    -0.0014
##    160      0.3952      nan      0.1000    -0.0005
##    180      0.3619      nan      0.1000    -0.0021
##    200      0.3357      nan      0.1000    -0.0019
##    220      0.3060      nan      0.1000    -0.0014
##    240      0.2809      nan      0.1000    -0.0010
##    250      0.2697      nan      0.1000    -0.0013
##

```


##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2210	nan	0.1000	0.0263
##	2	1.1590	nan	0.1000	0.0256
##	3	1.1136	nan	0.1000	0.0179
##	4	1.0676	nan	0.1000	0.0172
##	5	1.0318	nan	0.1000	0.0116
##	6	1.0003	nan	0.1000	0.0119
##	7	0.9776	nan	0.1000	0.0056
##	8	0.9531	nan	0.1000	0.0038
##	9	0.9291	nan	0.1000	0.0067
##	10	0.9107	nan	0.1000	0.0044
##	20	0.8003	nan	0.1000	-0.0014
##	40	0.6662	nan	0.1000	-0.0033
##	60	0.5741	nan	0.1000	-0.0037
##	80	0.4957	nan	0.1000	-0.0029
##	100	0.4426	nan	0.1000	-0.0018
##	120	0.3931	nan	0.1000	-0.0011
##	140	0.3528	nan	0.1000	-0.0024
##	160	0.3209	nan	0.1000	-0.0019
##	180	0.2904	nan	0.1000	-0.0011
##	200	0.2574	nan	0.1000	-0.0007
##	220	0.2316	nan	0.1000	-0.0016
##	240	0.2126	nan	0.1000	-0.0010
##	250	0.2038	nan	0.1000	-0.0005

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2541	nan	0.1000	0.0164
##	2	1.2213	nan	0.1000	0.0138
##	3	1.1978	nan	0.1000	0.0112
##	4	1.1753	nan	0.1000	0.0112
##	5	1.1515	nan	0.1000	0.0082
##	6	1.1299	nan	0.1000	0.0100
##	7	1.1136	nan	0.1000	0.0053
##	8	1.0993	nan	0.1000	0.0033
##	9	1.0825	nan	0.1000	0.0057
##	10	1.0664	nan	0.1000	0.0071
##	20	0.9664	nan	0.1000	0.0011
##	40	0.8756	nan	0.1000	0.0002
##	60	0.8351	nan	0.1000	-0.0004
##	80	0.8090	nan	0.1000	-0.0004
##	100	0.7885	nan	0.1000	-0.0011
##	120	0.7725	nan	0.1000	-0.0012
##	140	0.7585	nan	0.1000	-0.0013
##	160	0.7459	nan	0.1000	-0.0005
##	180	0.7384	nan	0.1000	-0.0015
##	200	0.7276	nan	0.1000	-0.0019
##	220	0.7190	nan	0.1000	-0.0015
##	240	0.7093	nan	0.1000	-0.0007
##	250	0.7051	nan	0.1000	-0.0008

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2462	nan	0.1000	0.0196
##	2	1.2012	nan	0.1000	0.0215
##	3	1.1641	nan	0.1000	0.0167

##	4	1.1274	nan	0.1000	0.0145
##	5	1.0974	nan	0.1000	0.0107
##	6	1.0776	nan	0.1000	0.0066
##	7	1.0611	nan	0.1000	0.0044
##	8	1.0386	nan	0.1000	0.0086
##	9	1.0214	nan	0.1000	0.0084
##	10	1.0074	nan	0.1000	0.0036
##	20	0.8955	nan	0.1000	0.0014
##	40	0.7997	nan	0.1000	0.0002
##	60	0.7499	nan	0.1000	-0.0003
##	80	0.7120	nan	0.1000	-0.0013
##	100	0.6859	nan	0.1000	-0.0020
##	120	0.6547	nan	0.1000	-0.0023
##	140	0.6355	nan	0.1000	-0.0002
##	160	0.6121	nan	0.1000	-0.0016
##	180	0.5879	nan	0.1000	-0.0009
##	200	0.5635	nan	0.1000	-0.0016
##	220	0.5470	nan	0.1000	-0.0023
##	240	0.5299	nan	0.1000	-0.0019
##	250	0.5208	nan	0.1000	-0.0012

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2451	nan	0.1000	0.0222
##	2	1.1952	nan	0.1000	0.0234
##	3	1.1506	nan	0.1000	0.0195
##	4	1.1158	nan	0.1000	0.0122
##	5	1.0874	nan	0.1000	0.0085
##	6	1.0566	nan	0.1000	0.0112
##	7	1.0327	nan	0.1000	0.0056
##	8	1.0049	nan	0.1000	0.0104
##	9	0.9816	nan	0.1000	0.0087
##	10	0.9646	nan	0.1000	0.0050
##	20	0.8572	nan	0.1000	0.0020
##	40	0.7443	nan	0.1000	0.0003
##	60	0.6883	nan	0.1000	-0.0039
##	80	0.6354	nan	0.1000	-0.0024
##	100	0.5920	nan	0.1000	-0.0029
##	120	0.5499	nan	0.1000	-0.0011
##	140	0.5133	nan	0.1000	-0.0014
##	160	0.4793	nan	0.1000	-0.0011
##	180	0.4542	nan	0.1000	-0.0014
##	200	0.4299	nan	0.1000	-0.0012
##	220	0.4070	nan	0.1000	-0.0018
##	240	0.3843	nan	0.1000	-0.0013
##	250	0.3740	nan	0.1000	-0.0017

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2403	nan	0.1000	0.0180
##	2	1.1804	nan	0.1000	0.0262
##	3	1.1283	nan	0.1000	0.0193
##	4	1.0910	nan	0.1000	0.0139
##	5	1.0569	nan	0.1000	0.0125
##	6	1.0265	nan	0.1000	0.0090
##	7	0.9992	nan	0.1000	0.0101

##	8	0.9747	nan	0.1000	0.0080
##	9	0.9555	nan	0.1000	0.0053
##	10	0.9383	nan	0.1000	0.0057
##	20	0.8070	nan	0.1000	-0.0004
##	40	0.6925	nan	0.1000	-0.0022
##	60	0.6199	nan	0.1000	-0.0015
##	80	0.5561	nan	0.1000	-0.0008
##	100	0.5051	nan	0.1000	-0.0020
##	120	0.4630	nan	0.1000	-0.0008
##	140	0.4169	nan	0.1000	-0.0012
##	160	0.3837	nan	0.1000	-0.0044
##	180	0.3517	nan	0.1000	-0.0020
##	200	0.3245	nan	0.1000	-0.0012
##	220	0.3001	nan	0.1000	-0.0013
##	240	0.2807	nan	0.1000	-0.0017
##	250	0.2693	nan	0.1000	-0.0009

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2209	nan	0.1000	0.0311
##	2	1.1658	nan	0.1000	0.0242
##	3	1.1208	nan	0.1000	0.0170
##	4	1.0734	nan	0.1000	0.0153
##	5	1.0313	nan	0.1000	0.0164
##	6	1.0021	nan	0.1000	0.0109
##	7	0.9765	nan	0.1000	0.0055
##	8	0.9510	nan	0.1000	0.0085
##	9	0.9310	nan	0.1000	0.0050
##	10	0.9099	nan	0.1000	0.0066
##	20	0.7809	nan	0.1000	-0.0003
##	40	0.6377	nan	0.1000	-0.0005
##	60	0.5543	nan	0.1000	-0.0009
##	80	0.4832	nan	0.1000	-0.0031
##	100	0.4243	nan	0.1000	-0.0014
##	120	0.3789	nan	0.1000	-0.0022
##	140	0.3402	nan	0.1000	-0.0033
##	160	0.3069	nan	0.1000	-0.0007
##	180	0.2749	nan	0.1000	-0.0017
##	200	0.2465	nan	0.1000	-0.0006
##	220	0.2229	nan	0.1000	-0.0011
##	240	0.2002	nan	0.1000	-0.0010
##	250	0.1890	nan	0.1000	-0.0009

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2623	nan	0.1000	0.0173
##	2	1.2323	nan	0.1000	0.0166
##	3	1.2069	nan	0.1000	0.0123
##	4	1.1804	nan	0.1000	0.0094
##	5	1.1644	nan	0.1000	0.0045
##	6	1.1482	nan	0.1000	0.0082
##	7	1.1269	nan	0.1000	0.0088
##	8	1.1092	nan	0.1000	0.0051
##	9	1.0957	nan	0.1000	0.0067
##	10	1.0807	nan	0.1000	0.0056
##	20	0.9884	nan	0.1000	0.0015

##	40	0.9016	nan	0.1000	-0.0010
##	60	0.8641	nan	0.1000	-0.0010
##	80	0.8382	nan	0.1000	-0.0004
##	100	0.8154	nan	0.1000	-0.0006
##	120	0.8001	nan	0.1000	-0.0014
##	140	0.7882	nan	0.1000	-0.0014
##	160	0.7750	nan	0.1000	-0.0008
##	180	0.7655	nan	0.1000	-0.0010
##	200	0.7538	nan	0.1000	-0.0006
##	220	0.7420	nan	0.1000	-0.0027
##	240	0.7304	nan	0.1000	-0.0009
##	250	0.7272	nan	0.1000	-0.0011

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2472	nan	0.1000	0.0203
##	2	1.2088	nan	0.1000	0.0161
##	3	1.1752	nan	0.1000	0.0128
##	4	1.1478	nan	0.1000	0.0124
##	5	1.1200	nan	0.1000	0.0116
##	6	1.0979	nan	0.1000	0.0106
##	7	1.0814	nan	0.1000	0.0083
##	8	1.0612	nan	0.1000	0.0078
##	9	1.0441	nan	0.1000	0.0063
##	10	1.0257	nan	0.1000	0.0069
##	20	0.9220	nan	0.1000	0.0006
##	40	0.8236	nan	0.1000	-0.0002
##	60	0.7732	nan	0.1000	-0.0022
##	80	0.7354	nan	0.1000	-0.0012
##	100	0.7076	nan	0.1000	-0.0012
##	120	0.6789	nan	0.1000	-0.0029
##	140	0.6534	nan	0.1000	-0.0021
##	160	0.6247	nan	0.1000	-0.0015
##	180	0.6014	nan	0.1000	-0.0020
##	200	0.5800	nan	0.1000	-0.0014
##	220	0.5633	nan	0.1000	-0.0019
##	240	0.5455	nan	0.1000	-0.0023
##	250	0.5352	nan	0.1000	-0.0011

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2405	nan	0.1000	0.0202
##	2	1.1957	nan	0.1000	0.0172
##	3	1.1543	nan	0.1000	0.0146
##	4	1.1153	nan	0.1000	0.0157
##	5	1.0819	nan	0.1000	0.0110
##	6	1.0570	nan	0.1000	0.0054
##	7	1.0322	nan	0.1000	0.0083
##	8	1.0098	nan	0.1000	0.0068
##	9	0.9936	nan	0.1000	0.0035
##	10	0.9789	nan	0.1000	0.0032
##	20	0.8681	nan	0.1000	-0.0017
##	40	0.7622	nan	0.1000	-0.0013
##	60	0.6973	nan	0.1000	-0.0009
##	80	0.6484	nan	0.1000	-0.0030
##	100	0.6131	nan	0.1000	-0.0018

##	120	0.5740	nan	0.1000	-0.0021
##	140	0.5437	nan	0.1000	-0.0018
##	160	0.5121	nan	0.1000	-0.0024
##	180	0.4810	nan	0.1000	-0.0012
##	200	0.4541	nan	0.1000	-0.0014
##	220	0.4316	nan	0.1000	-0.0015
##	240	0.4065	nan	0.1000	-0.0010
##	250	0.3972	nan	0.1000	-0.0013

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2246	nan	0.1000	0.0252
##	2	1.1795	nan	0.1000	0.0178
##	3	1.1352	nan	0.1000	0.0184
##	4	1.1018	nan	0.1000	0.0129
##	5	1.0707	nan	0.1000	0.0110
##	6	1.0409	nan	0.1000	0.0116
##	7	1.0209	nan	0.1000	0.0029
##	8	0.9984	nan	0.1000	0.0068
##	9	0.9747	nan	0.1000	0.0092
##	10	0.9528	nan	0.1000	0.0049
##	20	0.8378	nan	0.1000	0.0008
##	40	0.7257	nan	0.1000	-0.0015
##	60	0.6558	nan	0.1000	-0.0026
##	80	0.5920	nan	0.1000	-0.0031
##	100	0.5323	nan	0.1000	-0.0019
##	120	0.4888	nan	0.1000	-0.0014
##	140	0.4534	nan	0.1000	-0.0002
##	160	0.4189	nan	0.1000	-0.0007
##	180	0.3876	nan	0.1000	-0.0018
##	200	0.3609	nan	0.1000	-0.0016
##	220	0.3300	nan	0.1000	-0.0005
##	240	0.3036	nan	0.1000	-0.0018
##	250	0.2926	nan	0.1000	-0.0008

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2210	nan	0.1000	0.0324
##	2	1.1703	nan	0.1000	0.0198
##	3	1.1278	nan	0.1000	0.0161
##	4	1.0821	nan	0.1000	0.0197
##	5	1.0546	nan	0.1000	0.0093
##	6	1.0292	nan	0.1000	0.0058
##	7	0.9964	nan	0.1000	0.0108
##	8	0.9777	nan	0.1000	0.0047
##	9	0.9560	nan	0.1000	0.0036
##	10	0.9375	nan	0.1000	0.0037
##	20	0.8144	nan	0.1000	-0.0020
##	40	0.6755	nan	0.1000	-0.0036
##	60	0.5940	nan	0.1000	-0.0005
##	80	0.5289	nan	0.1000	-0.0014
##	100	0.4682	nan	0.1000	-0.0007
##	120	0.4162	nan	0.1000	-0.0018
##	140	0.3700	nan	0.1000	-0.0021
##	160	0.3334	nan	0.1000	-0.0013
##	180	0.3001	nan	0.1000	-0.0013

```

##      200      0.2687      nan      0.1000     -0.0011
##      220      0.2436      nan      0.1000     -0.0015
##      240      0.2238      nan      0.1000     -0.0016
##      250      0.2121      nan      0.1000     -0.0009
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2491      nan      0.1000     0.0208
##      2      1.2125      nan      0.1000     0.0153
##      3      1.1817      nan      0.1000     0.0131
##      4      1.1577      nan      0.1000     0.0113
##      5      1.1355      nan      0.1000     0.0075
##      6      1.1179      nan      0.1000     0.0049
##      7      1.1010      nan      0.1000     0.0074
##      8      1.0820      nan      0.1000     0.0055
##      9      1.0671      nan      0.1000     0.0064
##     10      1.0536      nan      0.1000     0.0053
##     20      0.9575      nan      0.1000     0.0020
##     40      0.8676      nan      0.1000     0.0007
##     60      0.8252      nan      0.1000     -0.0018
##     80      0.7967      nan      0.1000     -0.0009
##    100      0.7763      nan      0.1000     -0.0012
##    120      0.7619      nan      0.1000     -0.0014
##    140      0.7515      nan      0.1000     -0.0014
##    160      0.7425      nan      0.1000     -0.0010
##    180      0.7313      nan      0.1000     -0.0024
##    200      0.7224      nan      0.1000     -0.0014
##    220      0.7120      nan      0.1000     -0.0007
##    240      0.7060      nan      0.1000     -0.0012
##    250      0.7004      nan      0.1000     -0.0016
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2460      nan      0.1000     0.0181
##      2      1.1944      nan      0.1000     0.0245
##      3      1.1544      nan      0.1000     0.0184
##      4      1.1222      nan      0.1000     0.0099
##      5      1.0919      nan      0.1000     0.0127
##      6      1.0660      nan      0.1000     0.0123
##      7      1.0440      nan      0.1000     0.0083
##      8      1.0206      nan      0.1000     0.0058
##      9      1.0013      nan      0.1000     0.0078
##     10      0.9838      nan      0.1000     0.0050
##     20      0.8814      nan      0.1000     -0.0004
##     40      0.7879      nan      0.1000     -0.0009
##     60      0.7352      nan      0.1000     -0.0004
##     80      0.6982      nan      0.1000     -0.0011
##    100      0.6738      nan      0.1000     -0.0033
##    120      0.6512      nan      0.1000     -0.0017
##    140      0.6239      nan      0.1000     -0.0012
##    160      0.6022      nan      0.1000     -0.0028
##    180      0.5808      nan      0.1000     0.0001
##    200      0.5581      nan      0.1000     -0.0018
##    220      0.5415      nan      0.1000     -0.0008
##    240      0.5263      nan      0.1000     -0.0017
##    250      0.5164      nan      0.1000     -0.0015

```

```
##
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1         1.2323         nan         0.1000     0.0270
##      2         1.1765         nan         0.1000     0.0254
##      3         1.1320         nan         0.1000     0.0165
##      4         1.1002         nan         0.1000     0.0108
##      5         1.0610         nan         0.1000     0.0154
##      6         1.0289         nan         0.1000     0.0121
##      7         1.0000         nan         0.1000     0.0102
##      8         0.9761         nan         0.1000     0.0055
##      9         0.9538         nan         0.1000     0.0052
##     10         0.9348         nan         0.1000     0.0047
##     20         0.8286         nan         0.1000     0.0021
##     40         0.7157         nan         0.1000     0.0006
##     60         0.6547         nan         0.1000    -0.0024
##     80         0.6060         nan         0.1000    -0.0023
##    100         0.5630         nan         0.1000    -0.0026
##    120         0.5324         nan         0.1000    -0.0021
##    140         0.4939         nan         0.1000    -0.0021
##    160         0.4654         nan         0.1000    -0.0029
##    180         0.4405         nan         0.1000    -0.0016
##    200         0.4167         nan         0.1000    -0.0023
##    220         0.3938         nan         0.1000    -0.0018
##    240         0.3735         nan         0.1000    -0.0013
##    250         0.3645         nan         0.1000    -0.0012
##
```

```
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1         1.2258         nan         0.1000     0.0314
##      2         1.1756         nan         0.1000     0.0206
##      3         1.1251         nan         0.1000     0.0233
##      4         1.0883         nan         0.1000     0.0145
##      5         1.0506         nan         0.1000     0.0133
##      6         1.0192         nan         0.1000     0.0099
##      7         0.9862         nan         0.1000     0.0132
##      8         0.9663         nan         0.1000     0.0069
##      9         0.9495         nan         0.1000     0.0061
##     10         0.9316         nan         0.1000     0.0065
##     20         0.7903         nan         0.1000     0.0023
##     40         0.6729         nan         0.1000    -0.0004
##     60         0.6085         nan         0.1000    -0.0016
##     80         0.5449         nan         0.1000    -0.0015
##    100         0.4963         nan         0.1000    -0.0031
##    120         0.4440         nan         0.1000    -0.0014
##    140         0.4028         nan         0.1000    -0.0011
##    160         0.3701         nan         0.1000    -0.0015
##    180         0.3394         nan         0.1000    -0.0008
##    200         0.3083         nan         0.1000    -0.0017
##    220         0.2853         nan         0.1000    -0.0017
##    240         0.2686         nan         0.1000    -0.0015
##    250         0.2582         nan         0.1000    -0.0010
##
```

```
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1         1.2286         nan         0.1000     0.0229
##      2         1.1649         nan         0.1000     0.0311
```

##	3	1.1058	nan	0.1000	0.0187
##	4	1.0643	nan	0.1000	0.0166
##	5	1.0268	nan	0.1000	0.0168
##	6	0.9941	nan	0.1000	0.0124
##	7	0.9623	nan	0.1000	0.0114
##	8	0.9427	nan	0.1000	0.0061
##	9	0.9231	nan	0.1000	0.0062
##	10	0.9029	nan	0.1000	0.0076
##	20	0.7800	nan	0.1000	0.0012
##	40	0.6336	nan	0.1000	-0.0032
##	60	0.5420	nan	0.1000	-0.0025
##	80	0.4726	nan	0.1000	-0.0016
##	100	0.4198	nan	0.1000	-0.0011
##	120	0.3696	nan	0.1000	-0.0024
##	140	0.3339	nan	0.1000	-0.0006
##	160	0.3046	nan	0.1000	-0.0006
##	180	0.2696	nan	0.1000	-0.0018
##	200	0.2450	nan	0.1000	-0.0015
##	220	0.2244	nan	0.1000	-0.0012
##	240	0.2030	nan	0.1000	-0.0006
##	250	0.1949	nan	0.1000	-0.0010

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2551	nan	0.1000	0.0146
##	2	1.2217	nan	0.1000	0.0166
##	3	1.1911	nan	0.1000	0.0110
##	4	1.1665	nan	0.1000	0.0087
##	5	1.1431	nan	0.1000	0.0103
##	6	1.1266	nan	0.1000	0.0074
##	7	1.1133	nan	0.1000	0.0049
##	8	1.0964	nan	0.1000	0.0055
##	9	1.0831	nan	0.1000	0.0062
##	10	1.0671	nan	0.1000	0.0044
##	20	0.9724	nan	0.1000	0.0028
##	40	0.8960	nan	0.1000	-0.0010
##	60	0.8525	nan	0.1000	-0.0008
##	80	0.8247	nan	0.1000	-0.0005
##	100	0.8036	nan	0.1000	-0.0018
##	120	0.7877	nan	0.1000	-0.0000
##	140	0.7788	nan	0.1000	-0.0010
##	160	0.7664	nan	0.1000	-0.0020
##	180	0.7553	nan	0.1000	-0.0002
##	200	0.7471	nan	0.1000	-0.0017
##	220	0.7393	nan	0.1000	-0.0011
##	240	0.7290	nan	0.1000	-0.0005
##	250	0.7244	nan	0.1000	-0.0006

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2421	nan	0.1000	0.0251
##	2	1.2031	nan	0.1000	0.0159
##	3	1.1688	nan	0.1000	0.0164
##	4	1.1342	nan	0.1000	0.0126
##	5	1.1079	nan	0.1000	0.0075
##	6	1.0804	nan	0.1000	0.0104

##	7	1.0590	nan	0.1000	0.0085
##	8	1.0402	nan	0.1000	0.0087
##	9	1.0207	nan	0.1000	0.0074
##	10	1.0080	nan	0.1000	0.0037
##	20	0.9061	nan	0.1000	-0.0002
##	40	0.8142	nan	0.1000	-0.0014
##	60	0.7647	nan	0.1000	-0.0012
##	80	0.7366	nan	0.1000	-0.0005
##	100	0.7063	nan	0.1000	-0.0028
##	120	0.6858	nan	0.1000	-0.0026
##	140	0.6580	nan	0.1000	-0.0015
##	160	0.6275	nan	0.1000	-0.0017
##	180	0.6072	nan	0.1000	-0.0011
##	200	0.5845	nan	0.1000	-0.0016
##	220	0.5672	nan	0.1000	-0.0045
##	240	0.5447	nan	0.1000	-0.0012
##	250	0.5378	nan	0.1000	-0.0021

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2324	nan	0.1000	0.0295
##	2	1.1916	nan	0.1000	0.0176
##	3	1.1525	nan	0.1000	0.0164
##	4	1.1177	nan	0.1000	0.0121
##	5	1.0904	nan	0.1000	0.0119
##	6	1.0584	nan	0.1000	0.0130
##	7	1.0307	nan	0.1000	0.0096
##	8	1.0096	nan	0.1000	0.0081
##	9	0.9888	nan	0.1000	0.0058
##	10	0.9714	nan	0.1000	0.0070
##	20	0.8552	nan	0.1000	-0.0020
##	40	0.7563	nan	0.1000	-0.0006
##	60	0.6984	nan	0.1000	-0.0013
##	80	0.6435	nan	0.1000	-0.0029
##	100	0.6004	nan	0.1000	-0.0021
##	120	0.5575	nan	0.1000	-0.0017
##	140	0.5243	nan	0.1000	-0.0017
##	160	0.4914	nan	0.1000	-0.0013
##	180	0.4584	nan	0.1000	-0.0012
##	200	0.4299	nan	0.1000	-0.0020
##	220	0.4038	nan	0.1000	-0.0013
##	240	0.3814	nan	0.1000	-0.0015
##	250	0.3714	nan	0.1000	-0.0008

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2186	nan	0.1000	0.0283
##	2	1.1734	nan	0.1000	0.0195
##	3	1.1200	nan	0.1000	0.0216
##	4	1.0776	nan	0.1000	0.0189
##	5	1.0461	nan	0.1000	0.0131
##	6	1.0153	nan	0.1000	0.0105
##	7	0.9903	nan	0.1000	0.0082
##	8	0.9665	nan	0.1000	0.0077
##	9	0.9450	nan	0.1000	0.0052
##	10	0.9258	nan	0.1000	0.0063

##	20	0.8081	nan	0.1000	-0.0016
##	40	0.6954	nan	0.1000	-0.0024
##	60	0.6248	nan	0.1000	-0.0007
##	80	0.5684	nan	0.1000	-0.0026
##	100	0.5151	nan	0.1000	-0.0018
##	120	0.4775	nan	0.1000	-0.0025
##	140	0.4377	nan	0.1000	-0.0003
##	160	0.4020	nan	0.1000	-0.0014
##	180	0.3727	nan	0.1000	-0.0016
##	200	0.3470	nan	0.1000	-0.0020
##	220	0.3229	nan	0.1000	-0.0012
##	240	0.2972	nan	0.1000	-0.0009
##	250	0.2877	nan	0.1000	-0.0015

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2363	nan	0.1000	0.0193
##	2	1.1818	nan	0.1000	0.0192
##	3	1.1276	nan	0.1000	0.0224
##	4	1.0873	nan	0.1000	0.0153
##	5	1.0492	nan	0.1000	0.0134
##	6	1.0215	nan	0.1000	0.0096
##	7	0.9968	nan	0.1000	0.0078
##	8	0.9702	nan	0.1000	0.0078
##	9	0.9487	nan	0.1000	0.0066
##	10	0.9336	nan	0.1000	0.0008
##	20	0.7974	nan	0.1000	-0.0013
##	40	0.6539	nan	0.1000	-0.0032
##	60	0.5751	nan	0.1000	-0.0022
##	80	0.5081	nan	0.1000	-0.0016
##	100	0.4506	nan	0.1000	-0.0029
##	120	0.4049	nan	0.1000	-0.0033
##	140	0.3639	nan	0.1000	-0.0012
##	160	0.3282	nan	0.1000	-0.0021
##	180	0.2935	nan	0.1000	-0.0006
##	200	0.2665	nan	0.1000	-0.0010
##	220	0.2405	nan	0.1000	-0.0008
##	240	0.2200	nan	0.1000	-0.0021
##	250	0.2087	nan	0.1000	-0.0008

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2474	nan	0.1000	0.0202
##	2	1.2164	nan	0.1000	0.0161
##	3	1.1876	nan	0.1000	0.0124
##	4	1.1620	nan	0.1000	0.0103
##	5	1.1438	nan	0.1000	0.0083
##	6	1.1262	nan	0.1000	0.0085
##	7	1.1091	nan	0.1000	0.0068
##	8	1.0942	nan	0.1000	0.0055
##	9	1.0797	nan	0.1000	0.0049
##	10	1.0676	nan	0.1000	0.0051
##	20	0.9736	nan	0.1000	-0.0004
##	40	0.8841	nan	0.1000	-0.0002
##	60	0.8400	nan	0.1000	0.0003
##	80	0.8155	nan	0.1000	-0.0003

##	100	0.7953	nan	0.1000	-0.0005
##	120	0.7788	nan	0.1000	-0.0022
##	140	0.7629	nan	0.1000	-0.0000
##	160	0.7555	nan	0.1000	-0.0016
##	180	0.7423	nan	0.1000	-0.0007
##	200	0.7343	nan	0.1000	-0.0019
##	220	0.7258	nan	0.1000	-0.0008
##	240	0.7167	nan	0.1000	-0.0021
##	250	0.7107	nan	0.1000	-0.0013

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2455	nan	0.1000	0.0259
##	2	1.1996	nan	0.1000	0.0163
##	3	1.1621	nan	0.1000	0.0176
##	4	1.1288	nan	0.1000	0.0137
##	5	1.0984	nan	0.1000	0.0112
##	6	1.0767	nan	0.1000	0.0071
##	7	1.0612	nan	0.1000	0.0041
##	8	1.0428	nan	0.1000	0.0072
##	9	1.0249	nan	0.1000	0.0082
##	10	1.0101	nan	0.1000	0.0037
##	20	0.9074	nan	0.1000	0.0016
##	40	0.7986	nan	0.1000	-0.0001
##	60	0.7436	nan	0.1000	-0.0010
##	80	0.7105	nan	0.1000	-0.0011
##	100	0.6846	nan	0.1000	-0.0017
##	120	0.6572	nan	0.1000	-0.0016
##	140	0.6301	nan	0.1000	-0.0014
##	160	0.6061	nan	0.1000	-0.0009
##	180	0.5801	nan	0.1000	-0.0024
##	200	0.5601	nan	0.1000	-0.0008
##	220	0.5442	nan	0.1000	-0.0014
##	240	0.5261	nan	0.1000	-0.0010
##	250	0.5194	nan	0.1000	-0.0022

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2284	nan	0.1000	0.0241
##	2	1.1817	nan	0.1000	0.0189
##	3	1.1426	nan	0.1000	0.0165
##	4	1.1101	nan	0.1000	0.0124
##	5	1.0808	nan	0.1000	0.0098
##	6	1.0527	nan	0.1000	0.0106
##	7	1.0283	nan	0.1000	0.0075
##	8	1.0070	nan	0.1000	0.0092
##	9	0.9863	nan	0.1000	0.0059
##	10	0.9651	nan	0.1000	0.0085
##	20	0.8407	nan	0.1000	0.0007
##	40	0.7392	nan	0.1000	-0.0019
##	60	0.6749	nan	0.1000	-0.0030
##	80	0.6307	nan	0.1000	-0.0027
##	100	0.5906	nan	0.1000	-0.0015
##	120	0.5548	nan	0.1000	-0.0022
##	140	0.5288	nan	0.1000	-0.0026
##	160	0.4933	nan	0.1000	-0.0002

##	180	0.4683	nan	0.1000	-0.0012
##	200	0.4462	nan	0.1000	-0.0021
##	220	0.4211	nan	0.1000	-0.0019
##	240	0.3951	nan	0.1000	-0.0031
##	250	0.3822	nan	0.1000	-0.0010

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2292	nan	0.1000	0.0273
##	2	1.1841	nan	0.1000	0.0187
##	3	1.1402	nan	0.1000	0.0188
##	4	1.1040	nan	0.1000	0.0115
##	5	1.0752	nan	0.1000	0.0094
##	6	1.0405	nan	0.1000	0.0126
##	7	1.0099	nan	0.1000	0.0098
##	8	0.9786	nan	0.1000	0.0067
##	9	0.9529	nan	0.1000	0.0074
##	10	0.9308	nan	0.1000	0.0052
##	20	0.8072	nan	0.1000	0.0013
##	40	0.6925	nan	0.1000	-0.0006
##	60	0.6291	nan	0.1000	-0.0015
##	80	0.5699	nan	0.1000	-0.0026
##	100	0.5140	nan	0.1000	-0.0025
##	120	0.4759	nan	0.1000	-0.0029
##	140	0.4389	nan	0.1000	-0.0016
##	160	0.4073	nan	0.1000	-0.0017
##	180	0.3772	nan	0.1000	-0.0022
##	200	0.3432	nan	0.1000	-0.0015
##	220	0.3168	nan	0.1000	-0.0023
##	240	0.2930	nan	0.1000	-0.0010
##	250	0.2803	nan	0.1000	-0.0011

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2260	nan	0.1000	0.0338
##	2	1.1668	nan	0.1000	0.0265
##	3	1.1197	nan	0.1000	0.0178
##	4	1.0750	nan	0.1000	0.0179
##	5	1.0333	nan	0.1000	0.0171
##	6	1.0036	nan	0.1000	0.0094
##	7	0.9698	nan	0.1000	0.0086
##	8	0.9507	nan	0.1000	0.0043
##	9	0.9319	nan	0.1000	0.0038
##	10	0.9150	nan	0.1000	0.0046
##	20	0.7850	nan	0.1000	-0.0033
##	40	0.6568	nan	0.1000	0.0004
##	60	0.5765	nan	0.1000	-0.0048
##	80	0.4992	nan	0.1000	-0.0022
##	100	0.4407	nan	0.1000	-0.0013
##	120	0.3913	nan	0.1000	-0.0029
##	140	0.3515	nan	0.1000	0.0003
##	160	0.3120	nan	0.1000	-0.0018
##	180	0.2829	nan	0.1000	-0.0021
##	200	0.2595	nan	0.1000	-0.0019
##	220	0.2351	nan	0.1000	-0.0007
##	240	0.2132	nan	0.1000	-0.0004

```

##      250      0.2056      nan      0.1000     -0.0009
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2570      nan      0.1000     0.0117
##      2      1.2269      nan      0.1000     0.0134
##      3      1.1995      nan      0.1000     0.0108
##      4      1.1741      nan      0.1000     0.0114
##      5      1.1541      nan      0.1000     0.0065
##      6      1.1349      nan      0.1000     0.0063
##      7      1.1179      nan      0.1000     0.0077
##      8      1.1042      nan      0.1000     0.0050
##      9      1.0875      nan      0.1000     0.0047
##     10      1.0792      nan      0.1000     0.0029
##     20      0.9803      nan      0.1000     0.0018
##     40      0.9009      nan      0.1000    -0.0002
##     60      0.8607      nan      0.1000    -0.0005
##     80      0.8355      nan      0.1000    -0.0010
##    100      0.8165      nan      0.1000    -0.0016
##    120      0.8004      nan      0.1000    -0.0007
##    140      0.7823      nan      0.1000    -0.0021
##    160      0.7708      nan      0.1000    -0.0003
##    180      0.7582      nan      0.1000    -0.0009
##    200      0.7451      nan      0.1000    -0.0018
##    220      0.7352      nan      0.1000    -0.0004
##    240      0.7280      nan      0.1000    -0.0006
##    250      0.7209      nan      0.1000    -0.0026
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2499      nan      0.1000     0.0230
##      2      1.2102      nan      0.1000     0.0150
##      3      1.1727      nan      0.1000     0.0159
##      4      1.1411      nan      0.1000     0.0134
##      5      1.1139      nan      0.1000     0.0127
##      6      1.0913      nan      0.1000     0.0086
##      7      1.0709      nan      0.1000     0.0091
##      8      1.0488      nan      0.1000     0.0044
##      9      1.0347      nan      0.1000     0.0028
##     10      1.0157      nan      0.1000     0.0059
##     20      0.9100      nan      0.1000    -0.0009
##     40      0.8094      nan      0.1000    -0.0005
##     60      0.7511      nan      0.1000    -0.0008
##     80      0.7174      nan      0.1000    -0.0010
##    100      0.6862      nan      0.1000    -0.0001
##    120      0.6609      nan      0.1000    -0.0027
##    140      0.6326      nan      0.1000    -0.0021
##    160      0.6092      nan      0.1000    -0.0040
##    180      0.5909      nan      0.1000    -0.0005
##    200      0.5716      nan      0.1000    -0.0021
##    220      0.5526      nan      0.1000    -0.0004
##    240      0.5356      nan      0.1000    -0.0022
##    250      0.5274      nan      0.1000    -0.0023
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2377      nan      0.1000     0.0238

```

##	2	1.1850	nan	0.1000	0.0200
##	3	1.1410	nan	0.1000	0.0185
##	4	1.1091	nan	0.1000	0.0139
##	5	1.0796	nan	0.1000	0.0092
##	6	1.0519	nan	0.1000	0.0082
##	7	1.0271	nan	0.1000	0.0100
##	8	1.0108	nan	0.1000	0.0049
##	9	0.9898	nan	0.1000	0.0075
##	10	0.9713	nan	0.1000	0.0074
##	20	0.8659	nan	0.1000	-0.0015
##	40	0.7486	nan	0.1000	-0.0004
##	60	0.6865	nan	0.1000	-0.0021
##	80	0.6389	nan	0.1000	-0.0020
##	100	0.5916	nan	0.1000	-0.0010
##	120	0.5524	nan	0.1000	-0.0011
##	140	0.5201	nan	0.1000	-0.0016
##	160	0.4888	nan	0.1000	-0.0018
##	180	0.4605	nan	0.1000	-0.0012
##	200	0.4328	nan	0.1000	-0.0013
##	220	0.4128	nan	0.1000	-0.0019
##	240	0.3936	nan	0.1000	-0.0024
##	250	0.3811	nan	0.1000	-0.0013

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2294	nan	0.1000	0.0334
##	2	1.1718	nan	0.1000	0.0216
##	3	1.1216	nan	0.1000	0.0225
##	4	1.0907	nan	0.1000	0.0136
##	5	1.0511	nan	0.1000	0.0163
##	6	1.0211	nan	0.1000	0.0081
##	7	0.9970	nan	0.1000	0.0086
##	8	0.9724	nan	0.1000	0.0083
##	9	0.9509	nan	0.1000	0.0074
##	10	0.9290	nan	0.1000	0.0089
##	20	0.8208	nan	0.1000	0.0002
##	40	0.6995	nan	0.1000	-0.0050
##	60	0.6247	nan	0.1000	-0.0031
##	80	0.5625	nan	0.1000	-0.0026
##	100	0.5063	nan	0.1000	-0.0021
##	120	0.4678	nan	0.1000	-0.0025
##	140	0.4278	nan	0.1000	-0.0021
##	160	0.3855	nan	0.1000	-0.0026
##	180	0.3549	nan	0.1000	-0.0012
##	200	0.3270	nan	0.1000	-0.0034
##	220	0.3066	nan	0.1000	-0.0030
##	240	0.2834	nan	0.1000	-0.0009
##	250	0.2723	nan	0.1000	-0.0010

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2245	nan	0.1000	0.0321
##	2	1.1669	nan	0.1000	0.0228
##	3	1.1206	nan	0.1000	0.0144
##	4	1.0828	nan	0.1000	0.0112
##	5	1.0478	nan	0.1000	0.0103

##	6	1.0182	nan	0.1000	0.0086
##	7	0.9932	nan	0.1000	0.0068
##	8	0.9710	nan	0.1000	0.0069
##	9	0.9511	nan	0.1000	0.0038
##	10	0.9297	nan	0.1000	0.0043
##	20	0.7921	nan	0.1000	0.0018
##	40	0.6571	nan	0.1000	-0.0047
##	60	0.5763	nan	0.1000	-0.0024
##	80	0.5107	nan	0.1000	-0.0033
##	100	0.4622	nan	0.1000	-0.0016
##	120	0.4052	nan	0.1000	-0.0008
##	140	0.3633	nan	0.1000	-0.0019
##	160	0.3153	nan	0.1000	-0.0014
##	180	0.2862	nan	0.1000	-0.0013
##	200	0.2622	nan	0.1000	-0.0008
##	220	0.2381	nan	0.1000	-0.0007
##	240	0.2136	nan	0.1000	-0.0007
##	250	0.2044	nan	0.1000	-0.0010

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2556	nan	0.1000	0.0171
##	2	1.2246	nan	0.1000	0.0127
##	3	1.2009	nan	0.1000	0.0100
##	4	1.1751	nan	0.1000	0.0110
##	5	1.1575	nan	0.1000	0.0056
##	6	1.1373	nan	0.1000	0.0096
##	7	1.1192	nan	0.1000	0.0076
##	8	1.0997	nan	0.1000	0.0074
##	9	1.0810	nan	0.1000	0.0066
##	10	1.0663	nan	0.1000	0.0055
##	20	0.9660	nan	0.1000	-0.0003
##	40	0.8807	nan	0.1000	-0.0007
##	60	0.8425	nan	0.1000	-0.0014
##	80	0.8113	nan	0.1000	-0.0023
##	100	0.7941	nan	0.1000	-0.0022
##	120	0.7800	nan	0.1000	-0.0007
##	140	0.7650	nan	0.1000	-0.0016
##	160	0.7531	nan	0.1000	-0.0002
##	180	0.7434	nan	0.1000	-0.0020
##	200	0.7332	nan	0.1000	-0.0004
##	220	0.7258	nan	0.1000	-0.0020
##	240	0.7178	nan	0.1000	-0.0013
##	250	0.7154	nan	0.1000	-0.0037

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2455	nan	0.1000	0.0171
##	2	1.2015	nan	0.1000	0.0197
##	3	1.1618	nan	0.1000	0.0160
##	4	1.1283	nan	0.1000	0.0117
##	5	1.1002	nan	0.1000	0.0124
##	6	1.0760	nan	0.1000	0.0090
##	7	1.0569	nan	0.1000	0.0093
##	8	1.0369	nan	0.1000	0.0093
##	9	1.0181	nan	0.1000	0.0081

##	10	1.0057	nan	0.1000	0.0036
##	20	0.9044	nan	0.1000	0.0000
##	40	0.8017	nan	0.1000	-0.0015
##	60	0.7415	nan	0.1000	-0.0010
##	80	0.7093	nan	0.1000	0.0002
##	100	0.6782	nan	0.1000	-0.0041
##	120	0.6523	nan	0.1000	-0.0014
##	140	0.6244	nan	0.1000	-0.0011
##	160	0.6040	nan	0.1000	-0.0011
##	180	0.5811	nan	0.1000	-0.0021
##	200	0.5567	nan	0.1000	-0.0017
##	220	0.5367	nan	0.1000	-0.0014
##	240	0.5229	nan	0.1000	-0.0026
##	250	0.5127	nan	0.1000	-0.0013

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2306	nan	0.1000	0.0266
##	2	1.1816	nan	0.1000	0.0207
##	3	1.1379	nan	0.1000	0.0177
##	4	1.1015	nan	0.1000	0.0168
##	5	1.0670	nan	0.1000	0.0109
##	6	1.0434	nan	0.1000	0.0075
##	7	1.0145	nan	0.1000	0.0120
##	8	0.9914	nan	0.1000	0.0100
##	9	0.9724	nan	0.1000	0.0044
##	10	0.9564	nan	0.1000	0.0050
##	20	0.8418	nan	0.1000	0.0021
##	40	0.7429	nan	0.1000	-0.0005
##	60	0.6758	nan	0.1000	-0.0012
##	80	0.6209	nan	0.1000	-0.0009
##	100	0.5796	nan	0.1000	-0.0018
##	120	0.5406	nan	0.1000	-0.0001
##	140	0.5039	nan	0.1000	-0.0019
##	160	0.4754	nan	0.1000	-0.0023
##	180	0.4381	nan	0.1000	-0.0008
##	200	0.4195	nan	0.1000	-0.0020
##	220	0.3947	nan	0.1000	-0.0013
##	240	0.3725	nan	0.1000	-0.0014
##	250	0.3606	nan	0.1000	-0.0016

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2403	nan	0.1000	0.0213
##	2	1.1884	nan	0.1000	0.0225
##	3	1.1448	nan	0.1000	0.0126
##	4	1.1125	nan	0.1000	0.0125
##	5	1.0757	nan	0.1000	0.0147
##	6	1.0465	nan	0.1000	0.0079
##	7	1.0196	nan	0.1000	0.0072
##	8	0.9931	nan	0.1000	0.0101
##	9	0.9741	nan	0.1000	0.0033
##	10	0.9550	nan	0.1000	0.0059
##	20	0.8188	nan	0.1000	0.0016
##	40	0.6840	nan	0.1000	0.0009
##	60	0.6012	nan	0.1000	-0.0006

##	80	0.5392	nan	0.1000	-0.0028
##	100	0.4878	nan	0.1000	-0.0034
##	120	0.4428	nan	0.1000	-0.0010
##	140	0.4040	nan	0.1000	-0.0028
##	160	0.3735	nan	0.1000	-0.0024
##	180	0.3408	nan	0.1000	-0.0009
##	200	0.3161	nan	0.1000	-0.0009
##	220	0.2902	nan	0.1000	-0.0015
##	240	0.2682	nan	0.1000	-0.0006
##	250	0.2598	nan	0.1000	-0.0016

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2173	nan	0.1000	0.0304
##	2	1.1539	nan	0.1000	0.0216
##	3	1.1075	nan	0.1000	0.0187
##	4	1.0673	nan	0.1000	0.0136
##	5	1.0317	nan	0.1000	0.0130
##	6	1.0031	nan	0.1000	0.0084
##	7	0.9745	nan	0.1000	0.0115
##	8	0.9528	nan	0.1000	0.0069
##	9	0.9305	nan	0.1000	0.0049
##	10	0.9074	nan	0.1000	0.0070
##	20	0.7875	nan	0.1000	-0.0011
##	40	0.6458	nan	0.1000	-0.0019
##	60	0.5678	nan	0.1000	-0.0021
##	80	0.4994	nan	0.1000	-0.0028
##	100	0.4308	nan	0.1000	-0.0026
##	120	0.3857	nan	0.1000	-0.0014
##	140	0.3475	nan	0.1000	-0.0028
##	160	0.3120	nan	0.1000	-0.0013
##	180	0.2797	nan	0.1000	-0.0023
##	200	0.2546	nan	0.1000	-0.0018
##	220	0.2313	nan	0.1000	-0.0014
##	240	0.2089	nan	0.1000	-0.0009
##	250	0.1988	nan	0.1000	-0.0004

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2600	nan	0.1000	0.0157
##	2	1.2277	nan	0.1000	0.0179
##	3	1.1948	nan	0.1000	0.0130
##	4	1.1691	nan	0.1000	0.0095
##	5	1.1485	nan	0.1000	0.0093
##	6	1.1329	nan	0.1000	0.0075
##	7	1.1170	nan	0.1000	0.0067
##	8	1.1024	nan	0.1000	0.0057
##	9	1.0898	nan	0.1000	0.0054
##	10	1.0809	nan	0.1000	0.0027
##	20	0.9879	nan	0.1000	0.0025
##	40	0.9034	nan	0.1000	0.0005
##	60	0.8623	nan	0.1000	-0.0027
##	80	0.8332	nan	0.1000	-0.0004
##	100	0.8113	nan	0.1000	-0.0007
##	120	0.7972	nan	0.1000	-0.0010
##	140	0.7870	nan	0.1000	-0.0013

##	160	0.7749	nan	0.1000	-0.0015
##	180	0.7680	nan	0.1000	-0.0013
##	200	0.7604	nan	0.1000	-0.0018
##	220	0.7511	nan	0.1000	-0.0011
##	240	0.7454	nan	0.1000	-0.0019
##	250	0.7418	nan	0.1000	-0.0011

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2495	nan	0.1000	0.0221
##	2	1.2113	nan	0.1000	0.0184
##	3	1.1686	nan	0.1000	0.0172
##	4	1.1369	nan	0.1000	0.0121
##	5	1.1108	nan	0.1000	0.0091
##	6	1.0892	nan	0.1000	0.0103
##	7	1.0672	nan	0.1000	0.0094
##	8	1.0481	nan	0.1000	0.0061
##	9	1.0295	nan	0.1000	0.0059
##	10	1.0153	nan	0.1000	0.0025
##	20	0.9178	nan	0.1000	0.0024
##	40	0.8293	nan	0.1000	-0.0002
##	60	0.7760	nan	0.1000	-0.0050
##	80	0.7394	nan	0.1000	-0.0027
##	100	0.7132	nan	0.1000	-0.0015
##	120	0.6809	nan	0.1000	-0.0015
##	140	0.6535	nan	0.1000	-0.0007
##	160	0.6306	nan	0.1000	-0.0015
##	180	0.6089	nan	0.1000	-0.0015
##	200	0.5926	nan	0.1000	-0.0013
##	220	0.5744	nan	0.1000	-0.0014
##	240	0.5596	nan	0.1000	-0.0027
##	250	0.5491	nan	0.1000	-0.0021

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2345	nan	0.1000	0.0230
##	2	1.1892	nan	0.1000	0.0189
##	3	1.1492	nan	0.1000	0.0172
##	4	1.1137	nan	0.1000	0.0173
##	5	1.0839	nan	0.1000	0.0072
##	6	1.0614	nan	0.1000	0.0068
##	7	1.0408	nan	0.1000	0.0068
##	8	1.0210	nan	0.1000	0.0049
##	9	0.9990	nan	0.1000	0.0092
##	10	0.9833	nan	0.1000	0.0038
##	20	0.8707	nan	0.1000	0.0026
##	40	0.7675	nan	0.1000	-0.0044
##	60	0.7049	nan	0.1000	-0.0038
##	80	0.6624	nan	0.1000	-0.0019
##	100	0.6138	nan	0.1000	-0.0031
##	120	0.5759	nan	0.1000	-0.0021
##	140	0.5465	nan	0.1000	-0.0021
##	160	0.5160	nan	0.1000	-0.0018
##	180	0.4904	nan	0.1000	-0.0014
##	200	0.4652	nan	0.1000	-0.0022
##	220	0.4376	nan	0.1000	-0.0012

```

##      240      0.4178      nan      0.1000     -0.0027
##      250      0.4055      nan      0.1000     -0.0011
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2273      nan      0.1000     0.0226
##      2      1.1724      nan      0.1000     0.0227
##      3      1.1327      nan      0.1000     0.0103
##      4      1.0905      nan      0.1000     0.0153
##      5      1.0597      nan      0.1000     0.0120
##      6      1.0315      nan      0.1000     0.0072
##      7      1.0123      nan      0.1000     0.0040
##      8      0.9892      nan      0.1000     0.0083
##      9      0.9696      nan      0.1000     0.0042
##     10      0.9533      nan      0.1000     0.0046
##     20      0.8374      nan      0.1000    -0.0006
##     40      0.7201      nan      0.1000    -0.0009
##     60      0.6443      nan      0.1000    -0.0009
##     80      0.5830      nan      0.1000    -0.0013
##    100      0.5363      nan      0.1000    -0.0028
##    120      0.4924      nan      0.1000    -0.0044
##    140      0.4552      nan      0.1000    -0.0013
##    160      0.4180      nan      0.1000    -0.0027
##    180      0.3846      nan      0.1000    -0.0010
##    200      0.3554      nan      0.1000    -0.0015
##    220      0.3288      nan      0.1000    -0.0031
##    240      0.2999      nan      0.1000    -0.0010
##    250      0.2863      nan      0.1000    -0.0012
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2304      nan      0.1000     0.0285
##      2      1.1728      nan      0.1000     0.0200
##      3      1.1297      nan      0.1000     0.0156
##      4      1.0870      nan      0.1000     0.0163
##      5      1.0528      nan      0.1000     0.0113
##      6      1.0300      nan      0.1000     0.0047
##      7      1.0012      nan      0.1000     0.0102
##      8      0.9803      nan      0.1000     0.0044
##      9      0.9586      nan      0.1000     0.0050
##     10      0.9418      nan      0.1000     0.0033
##     20      0.8065      nan      0.1000    -0.0001
##     40      0.6664      nan      0.1000    -0.0007
##     60      0.5894      nan      0.1000    -0.0030
##     80      0.5184      nan      0.1000    -0.0035
##    100      0.4657      nan      0.1000    -0.0016
##    120      0.4155      nan      0.1000    -0.0026
##    140      0.3764      nan      0.1000    -0.0027
##    160      0.3425      nan      0.1000    -0.0022
##    180      0.3113      nan      0.1000    -0.0030
##    200      0.2810      nan      0.1000    -0.0019
##    220      0.2539      nan      0.1000    -0.0011
##    240      0.2303      nan      0.1000    -0.0014
##    250      0.2182      nan      0.1000     0.0001
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve

```

##	1	1.2546	nan	0.1000	0.0201
##	2	1.2222	nan	0.1000	0.0117
##	3	1.1901	nan	0.1000	0.0091
##	4	1.1707	nan	0.1000	0.0082
##	5	1.1479	nan	0.1000	0.0102
##	6	1.1252	nan	0.1000	0.0072
##	7	1.1087	nan	0.1000	0.0067
##	8	1.0908	nan	0.1000	0.0071
##	9	1.0785	nan	0.1000	0.0046
##	10	1.0651	nan	0.1000	0.0040
##	20	0.9637	nan	0.1000	0.0022
##	40	0.8861	nan	0.1000	-0.0026
##	60	0.8412	nan	0.1000	-0.0000
##	80	0.8080	nan	0.1000	0.0006
##	100	0.7879	nan	0.1000	-0.0007
##	120	0.7676	nan	0.1000	-0.0015
##	140	0.7536	nan	0.1000	-0.0004
##	160	0.7415	nan	0.1000	-0.0013
##	180	0.7309	nan	0.1000	-0.0008
##	200	0.7214	nan	0.1000	-0.0014
##	220	0.7137	nan	0.1000	-0.0017
##	240	0.7053	nan	0.1000	-0.0009
##	250	0.7002	nan	0.1000	-0.0019

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2407	nan	0.1000	0.0203
##	2	1.1983	nan	0.1000	0.0181
##	3	1.1601	nan	0.1000	0.0161
##	4	1.1286	nan	0.1000	0.0119
##	5	1.1020	nan	0.1000	0.0097
##	6	1.0807	nan	0.1000	0.0060
##	7	1.0644	nan	0.1000	0.0053
##	8	1.0423	nan	0.1000	0.0067
##	9	1.0224	nan	0.1000	0.0081
##	10	1.0031	nan	0.1000	0.0066
##	20	0.8899	nan	0.1000	0.0018
##	40	0.7961	nan	0.1000	0.0009
##	60	0.7412	nan	0.1000	-0.0025
##	80	0.7040	nan	0.1000	-0.0013
##	100	0.6731	nan	0.1000	-0.0026
##	120	0.6478	nan	0.1000	-0.0007
##	140	0.6260	nan	0.1000	-0.0009
##	160	0.5993	nan	0.1000	-0.0007
##	180	0.5729	nan	0.1000	-0.0014
##	200	0.5513	nan	0.1000	-0.0014
##	220	0.5306	nan	0.1000	-0.0010
##	240	0.5132	nan	0.1000	-0.0015
##	250	0.5016	nan	0.1000	-0.0008

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2369	nan	0.1000	0.0289
##	2	1.1900	nan	0.1000	0.0148
##	3	1.1562	nan	0.1000	0.0124
##	4	1.1195	nan	0.1000	0.0073

##	5	1.0831	nan	0.1000	0.0147
##	6	1.0543	nan	0.1000	0.0090
##	7	1.0270	nan	0.1000	0.0099
##	8	1.0116	nan	0.1000	0.0020
##	9	0.9882	nan	0.1000	0.0095
##	10	0.9705	nan	0.1000	0.0057
##	20	0.8536	nan	0.1000	0.0022
##	40	0.7473	nan	0.1000	-0.0015
##	60	0.6856	nan	0.1000	-0.0013
##	80	0.6321	nan	0.1000	-0.0020
##	100	0.5924	nan	0.1000	-0.0017
##	120	0.5583	nan	0.1000	-0.0017
##	140	0.5149	nan	0.1000	-0.0027
##	160	0.4803	nan	0.1000	-0.0016
##	180	0.4419	nan	0.1000	-0.0012
##	200	0.4185	nan	0.1000	-0.0027
##	220	0.3874	nan	0.1000	-0.0013
##	240	0.3682	nan	0.1000	-0.0013
##	250	0.3575	nan	0.1000	-0.0017

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2312	nan	0.1000	0.0276
##	2	1.1818	nan	0.1000	0.0185
##	3	1.1270	nan	0.1000	0.0206
##	4	1.0892	nan	0.1000	0.0131
##	5	1.0543	nan	0.1000	0.0140
##	6	1.0263	nan	0.1000	0.0092
##	7	1.0010	nan	0.1000	0.0088
##	8	0.9777	nan	0.1000	0.0036
##	9	0.9548	nan	0.1000	0.0093
##	10	0.9408	nan	0.1000	0.0033
##	20	0.8173	nan	0.1000	-0.0010
##	40	0.6915	nan	0.1000	-0.0030
##	60	0.6234	nan	0.1000	-0.0019
##	80	0.5593	nan	0.1000	-0.0001
##	100	0.5075	nan	0.1000	-0.0006
##	120	0.4619	nan	0.1000	-0.0028
##	140	0.4230	nan	0.1000	-0.0029
##	160	0.3844	nan	0.1000	-0.0022
##	180	0.3515	nan	0.1000	-0.0019
##	200	0.3182	nan	0.1000	-0.0015
##	220	0.2956	nan	0.1000	-0.0013
##	240	0.2747	nan	0.1000	-0.0017
##	250	0.2642	nan	0.1000	-0.0021

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2167	nan	0.1000	0.0374
##	2	1.1617	nan	0.1000	0.0206
##	3	1.1139	nan	0.1000	0.0162
##	4	1.0743	nan	0.1000	0.0155
##	5	1.0349	nan	0.1000	0.0106
##	6	0.9995	nan	0.1000	0.0126
##	7	0.9720	nan	0.1000	0.0079
##	8	0.9451	nan	0.1000	0.0097

##	9	0.9255	nan	0.1000	0.0062
##	10	0.9073	nan	0.1000	0.0031
##	20	0.7749	nan	0.1000	-0.0053
##	40	0.6405	nan	0.1000	0.0009
##	60	0.5515	nan	0.1000	-0.0017
##	80	0.4794	nan	0.1000	-0.0008
##	100	0.4293	nan	0.1000	-0.0020
##	120	0.3741	nan	0.1000	-0.0023
##	140	0.3338	nan	0.1000	-0.0009
##	160	0.3034	nan	0.1000	-0.0010
##	180	0.2758	nan	0.1000	-0.0016
##	200	0.2489	nan	0.1000	-0.0010
##	220	0.2251	nan	0.1000	-0.0013
##	240	0.2016	nan	0.1000	-0.0006
##	250	0.1902	nan	0.1000	-0.0017

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2559	nan	0.1000	0.0162
##	2	1.2188	nan	0.1000	0.0163
##	3	1.1898	nan	0.1000	0.0117
##	4	1.1647	nan	0.1000	0.0109
##	5	1.1418	nan	0.1000	0.0105
##	6	1.1258	nan	0.1000	0.0060
##	7	1.1111	nan	0.1000	0.0052
##	8	1.0935	nan	0.1000	0.0041
##	9	1.0768	nan	0.1000	0.0056
##	10	1.0596	nan	0.1000	0.0057
##	20	0.9666	nan	0.1000	0.0009
##	40	0.8821	nan	0.1000	0.0011
##	60	0.8335	nan	0.1000	-0.0008
##	80	0.8076	nan	0.1000	-0.0020
##	100	0.7872	nan	0.1000	-0.0004
##	120	0.7710	nan	0.1000	-0.0015
##	140	0.7557	nan	0.1000	-0.0012
##	160	0.7463	nan	0.1000	-0.0010
##	180	0.7394	nan	0.1000	-0.0013
##	200	0.7310	nan	0.1000	-0.0014
##	220	0.7215	nan	0.1000	-0.0004
##	240	0.7143	nan	0.1000	-0.0014
##	250	0.7112	nan	0.1000	-0.0012

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2495	nan	0.1000	0.0222
##	2	1.2064	nan	0.1000	0.0162
##	3	1.1671	nan	0.1000	0.0186
##	4	1.1363	nan	0.1000	0.0159
##	5	1.1079	nan	0.1000	0.0115
##	6	1.0829	nan	0.1000	0.0115
##	7	1.0630	nan	0.1000	0.0070
##	8	1.0409	nan	0.1000	0.0083
##	9	1.0227	nan	0.1000	0.0077
##	10	1.0056	nan	0.1000	0.0067
##	20	0.8947	nan	0.1000	0.0006
##	40	0.7963	nan	0.1000	0.0007

##	60	0.7423	nan	0.1000	-0.0026
##	80	0.7069	nan	0.1000	-0.0012
##	100	0.6778	nan	0.1000	-0.0025
##	120	0.6506	nan	0.1000	-0.0021
##	140	0.6277	nan	0.1000	-0.0014
##	160	0.5996	nan	0.1000	-0.0008
##	180	0.5824	nan	0.1000	-0.0013
##	200	0.5603	nan	0.1000	-0.0006
##	220	0.5419	nan	0.1000	-0.0014
##	240	0.5262	nan	0.1000	-0.0016
##	250	0.5178	nan	0.1000	-0.0011

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2398	nan	0.1000	0.0239
##	2	1.1875	nan	0.1000	0.0225
##	3	1.1392	nan	0.1000	0.0186
##	4	1.1068	nan	0.1000	0.0112
##	5	1.0747	nan	0.1000	0.0119
##	6	1.0488	nan	0.1000	0.0118
##	7	1.0259	nan	0.1000	0.0069
##	8	1.0038	nan	0.1000	0.0098
##	9	0.9878	nan	0.1000	0.0032
##	10	0.9673	nan	0.1000	0.0060
##	20	0.8556	nan	0.1000	0.0018
##	40	0.7478	nan	0.1000	-0.0008
##	60	0.6794	nan	0.1000	-0.0019
##	80	0.6242	nan	0.1000	-0.0036
##	100	0.5732	nan	0.1000	-0.0032
##	120	0.5395	nan	0.1000	-0.0022
##	140	0.5076	nan	0.1000	-0.0024
##	160	0.4785	nan	0.1000	-0.0001
##	180	0.4533	nan	0.1000	-0.0018
##	200	0.4300	nan	0.1000	-0.0013
##	220	0.4045	nan	0.1000	-0.0009
##	240	0.3795	nan	0.1000	-0.0018
##	250	0.3716	nan	0.1000	-0.0021

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2333	nan	0.1000	0.0275
##	2	1.1829	nan	0.1000	0.0203
##	3	1.1407	nan	0.1000	0.0166
##	4	1.0999	nan	0.1000	0.0130
##	5	1.0635	nan	0.1000	0.0153
##	6	1.0369	nan	0.1000	0.0091
##	7	1.0092	nan	0.1000	0.0092
##	8	0.9850	nan	0.1000	0.0085
##	9	0.9600	nan	0.1000	0.0033
##	10	0.9419	nan	0.1000	0.0042
##	20	0.8103	nan	0.1000	0.0010
##	40	0.6888	nan	0.1000	-0.0021
##	60	0.6166	nan	0.1000	-0.0047
##	80	0.5613	nan	0.1000	-0.0034
##	100	0.5135	nan	0.1000	-0.0027
##	120	0.4621	nan	0.1000	-0.0017

##	140	0.4242	nan	0.1000	-0.0020
##	160	0.3898	nan	0.1000	-0.0019
##	180	0.3610	nan	0.1000	-0.0013
##	200	0.3334	nan	0.1000	-0.0018
##	220	0.3069	nan	0.1000	-0.0014
##	240	0.2835	nan	0.1000	-0.0008
##	250	0.2748	nan	0.1000	-0.0018

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2230	nan	0.1000	0.0288
##	2	1.1670	nan	0.1000	0.0214
##	3	1.1181	nan	0.1000	0.0173
##	4	1.0792	nan	0.1000	0.0116
##	5	1.0391	nan	0.1000	0.0168
##	6	1.0029	nan	0.1000	0.0131
##	7	0.9712	nan	0.1000	0.0131
##	8	0.9495	nan	0.1000	0.0072
##	9	0.9262	nan	0.1000	0.0045
##	10	0.9034	nan	0.1000	0.0045
##	20	0.7777	nan	0.1000	-0.0028
##	40	0.6541	nan	0.1000	-0.0028
##	60	0.5665	nan	0.1000	-0.0035
##	80	0.4951	nan	0.1000	-0.0019
##	100	0.4355	nan	0.1000	-0.0027
##	120	0.3911	nan	0.1000	-0.0027
##	140	0.3482	nan	0.1000	-0.0000
##	160	0.3170	nan	0.1000	-0.0020
##	180	0.2837	nan	0.1000	-0.0026
##	200	0.2555	nan	0.1000	-0.0012
##	220	0.2351	nan	0.1000	-0.0007
##	240	0.2123	nan	0.1000	-0.0008
##	250	0.1991	nan	0.1000	-0.0012

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2653	nan	0.1000	0.0114
##	2	1.2276	nan	0.1000	0.0173
##	3	1.1964	nan	0.1000	0.0131
##	4	1.1735	nan	0.1000	0.0106
##	5	1.1499	nan	0.1000	0.0066
##	6	1.1343	nan	0.1000	0.0061
##	7	1.1188	nan	0.1000	0.0054
##	8	1.1060	nan	0.1000	0.0070
##	9	1.0888	nan	0.1000	0.0052
##	10	1.0729	nan	0.1000	0.0055
##	20	0.9789	nan	0.1000	-0.0003
##	40	0.8995	nan	0.1000	0.0001
##	60	0.8582	nan	0.1000	-0.0007
##	80	0.8296	nan	0.1000	-0.0023
##	100	0.8060	nan	0.1000	-0.0017
##	120	0.7925	nan	0.1000	-0.0011
##	140	0.7809	nan	0.1000	-0.0004
##	160	0.7681	nan	0.1000	-0.0010
##	180	0.7593	nan	0.1000	-0.0020
##	200	0.7493	nan	0.1000	-0.0002


```

##      220      0.7406      nan      0.1000     -0.0008
##      240      0.7323      nan      0.1000     -0.0007
##      250      0.7297      nan      0.1000     -0.0017
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2426      nan      0.1000     0.0222
##      2      1.2057      nan      0.1000     0.0159
##      3      1.1687      nan      0.1000     0.0195
##      4      1.1392      nan      0.1000     0.0102
##      5      1.1127      nan      0.1000     0.0106
##      6      1.0875      nan      0.1000     0.0110
##      7      1.0660      nan      0.1000     0.0038
##      8      1.0470      nan      0.1000     0.0069
##      9      1.0302      nan      0.1000     0.0036
##     10      1.0144      nan      0.1000     0.0037
##     20      0.9125      nan      0.1000    -0.0005
##     40      0.8208      nan      0.1000    -0.0013
##     60      0.7692      nan      0.1000    -0.0024
##     80      0.7382      nan      0.1000    -0.0021
##    100      0.7097      nan      0.1000    -0.0019
##    120      0.6801      nan      0.1000     0.0001
##    140      0.6554      nan      0.1000    -0.0016
##    160      0.6318      nan      0.1000    -0.0029
##    180      0.6104      nan      0.1000    -0.0018
##    200      0.5914      nan      0.1000    -0.0019
##    220      0.5696      nan      0.1000    -0.0015
##    240      0.5557      nan      0.1000    -0.0018
##    250      0.5489      nan      0.1000    -0.0009
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2440      nan      0.1000     0.0220
##      2      1.2023      nan      0.1000     0.0214
##      3      1.1647      nan      0.1000     0.0137
##      4      1.1271      nan      0.1000     0.0181
##      5      1.0929      nan      0.1000     0.0137
##      6      1.0684      nan      0.1000     0.0090
##      7      1.0417      nan      0.1000     0.0102
##      8      1.0214      nan      0.1000     0.0069
##      9      1.0018      nan      0.1000     0.0072
##     10      0.9858      nan      0.1000     0.0021
##     20      0.8694      nan      0.1000     0.0029
##     40      0.7693      nan      0.1000    -0.0016
##     60      0.7104      nan      0.1000    -0.0028
##     80      0.6609      nan      0.1000    -0.0020
##    100      0.6190      nan      0.1000    -0.0027
##    120      0.5852      nan      0.1000    -0.0016
##    140      0.5550      nan      0.1000    -0.0030
##    160      0.5231      nan      0.1000    -0.0017
##    180      0.4931      nan      0.1000    -0.0018
##    200      0.4689      nan      0.1000    -0.0022
##    220      0.4448      nan      0.1000    -0.0024
##    240      0.4190      nan      0.1000    -0.0015
##    250      0.4091      nan      0.1000    -0.0015
##

```

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2332	nan	0.1000	0.0229
##	2	1.1763	nan	0.1000	0.0220
##	3	1.1366	nan	0.1000	0.0183
##	4	1.0987	nan	0.1000	0.0094
##	5	1.0738	nan	0.1000	0.0055
##	6	1.0448	nan	0.1000	0.0067
##	7	1.0160	nan	0.1000	0.0105
##	8	0.9971	nan	0.1000	0.0023
##	9	0.9747	nan	0.1000	0.0070
##	10	0.9584	nan	0.1000	0.0044
##	20	0.8306	nan	0.1000	0.0007
##	40	0.7129	nan	0.1000	-0.0028
##	60	0.6438	nan	0.1000	-0.0017
##	80	0.5880	nan	0.1000	-0.0021
##	100	0.5440	nan	0.1000	-0.0018
##	120	0.5000	nan	0.1000	-0.0033
##	140	0.4619	nan	0.1000	-0.0007
##	160	0.4199	nan	0.1000	-0.0007
##	180	0.3895	nan	0.1000	-0.0025
##	200	0.3590	nan	0.1000	-0.0006
##	220	0.3315	nan	0.1000	-0.0007
##	240	0.3086	nan	0.1000	-0.0028
##	250	0.2984	nan	0.1000	-0.0010

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2305	nan	0.1000	0.0269
##	2	1.1823	nan	0.1000	0.0174
##	3	1.1313	nan	0.1000	0.0160
##	4	1.0961	nan	0.1000	0.0100
##	5	1.0557	nan	0.1000	0.0128
##	6	1.0247	nan	0.1000	0.0103
##	7	0.9991	nan	0.1000	0.0077
##	8	0.9767	nan	0.1000	0.0053
##	9	0.9576	nan	0.1000	0.0045
##	10	0.9380	nan	0.1000	0.0048
##	20	0.8101	nan	0.1000	-0.0007
##	40	0.6778	nan	0.1000	-0.0004
##	60	0.5836	nan	0.1000	-0.0039
##	80	0.5145	nan	0.1000	-0.0035
##	100	0.4615	nan	0.1000	-0.0026
##	120	0.4143	nan	0.1000	-0.0030
##	140	0.3713	nan	0.1000	-0.0010
##	160	0.3338	nan	0.1000	-0.0008
##	180	0.3054	nan	0.1000	-0.0013
##	200	0.2763	nan	0.1000	-0.0015
##	220	0.2503	nan	0.1000	-0.0017
##	240	0.2263	nan	0.1000	-0.0015
##	250	0.2143	nan	0.1000	-0.0013

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2487	nan	0.1000	0.0179
##	2	1.2153	nan	0.1000	0.0163
##	3	1.1864	nan	0.1000	0.0126

##	4	1.1635	nan	0.1000	0.0097
##	5	1.1387	nan	0.1000	0.0092
##	6	1.1223	nan	0.1000	0.0068
##	7	1.1015	nan	0.1000	0.0096
##	8	1.0863	nan	0.1000	0.0030
##	9	1.0796	nan	0.1000	-0.0013
##	10	1.0652	nan	0.1000	0.0039
##	20	0.9621	nan	0.1000	0.0025
##	40	0.8831	nan	0.1000	0.0002
##	60	0.8390	nan	0.1000	-0.0002
##	80	0.8074	nan	0.1000	-0.0004
##	100	0.7879	nan	0.1000	-0.0010
##	120	0.7740	nan	0.1000	-0.0012
##	140	0.7565	nan	0.1000	0.0001
##	160	0.7454	nan	0.1000	-0.0007
##	180	0.7304	nan	0.1000	-0.0007
##	200	0.7216	nan	0.1000	-0.0028
##	220	0.7136	nan	0.1000	-0.0009
##	240	0.7045	nan	0.1000	-0.0009
##	250	0.7017	nan	0.1000	-0.0027

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2424	nan	0.1000	0.0210
##	2	1.2009	nan	0.1000	0.0181
##	3	1.1591	nan	0.1000	0.0174
##	4	1.1236	nan	0.1000	0.0151
##	5	1.0999	nan	0.1000	0.0107
##	6	1.0724	nan	0.1000	0.0116
##	7	1.0469	nan	0.1000	0.0116
##	8	1.0294	nan	0.1000	0.0052
##	9	1.0105	nan	0.1000	0.0061
##	10	0.9945	nan	0.1000	0.0037
##	20	0.8867	nan	0.1000	0.0023
##	40	0.7876	nan	0.1000	-0.0008
##	60	0.7383	nan	0.1000	-0.0009
##	80	0.7087	nan	0.1000	-0.0007
##	100	0.6779	nan	0.1000	-0.0013
##	120	0.6467	nan	0.1000	-0.0025
##	140	0.6202	nan	0.1000	-0.0009
##	160	0.6002	nan	0.1000	-0.0016
##	180	0.5786	nan	0.1000	-0.0011
##	200	0.5569	nan	0.1000	-0.0021
##	220	0.5383	nan	0.1000	-0.0005
##	240	0.5178	nan	0.1000	-0.0024
##	250	0.5089	nan	0.1000	-0.0011

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2323	nan	0.1000	0.0281
##	2	1.1795	nan	0.1000	0.0237
##	3	1.1366	nan	0.1000	0.0171
##	4	1.1027	nan	0.1000	0.0140
##	5	1.0655	nan	0.1000	0.0157
##	6	1.0346	nan	0.1000	0.0113
##	7	1.0118	nan	0.1000	0.0071

##	8	0.9888	nan	0.1000	0.0067
##	9	0.9712	nan	0.1000	0.0054
##	10	0.9516	nan	0.1000	0.0066
##	20	0.8419	nan	0.1000	0.0019
##	40	0.7473	nan	0.1000	-0.0017
##	60	0.6777	nan	0.1000	-0.0016
##	80	0.6238	nan	0.1000	-0.0006
##	100	0.5794	nan	0.1000	-0.0015
##	120	0.5364	nan	0.1000	-0.0019
##	140	0.4993	nan	0.1000	-0.0026
##	160	0.4673	nan	0.1000	-0.0031
##	180	0.4399	nan	0.1000	-0.0004
##	200	0.4144	nan	0.1000	-0.0014
##	220	0.3909	nan	0.1000	-0.0012
##	240	0.3599	nan	0.1000	-0.0008
##	250	0.3493	nan	0.1000	-0.0016

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2189	nan	0.1000	0.0323
##	2	1.1642	nan	0.1000	0.0218
##	3	1.1201	nan	0.1000	0.0177
##	4	1.0808	nan	0.1000	0.0177
##	5	1.0484	nan	0.1000	0.0098
##	6	1.0177	nan	0.1000	0.0138
##	7	0.9949	nan	0.1000	0.0052
##	8	0.9691	nan	0.1000	0.0076
##	9	0.9491	nan	0.1000	0.0065
##	10	0.9269	nan	0.1000	0.0056
##	20	0.7946	nan	0.1000	0.0012
##	40	0.6841	nan	0.1000	-0.0018
##	60	0.6070	nan	0.1000	-0.0027
##	80	0.5441	nan	0.1000	-0.0028
##	100	0.4912	nan	0.1000	-0.0023
##	120	0.4474	nan	0.1000	-0.0019
##	140	0.4165	nan	0.1000	-0.0028
##	160	0.3766	nan	0.1000	-0.0012
##	180	0.3473	nan	0.1000	-0.0018
##	200	0.3147	nan	0.1000	-0.0007
##	220	0.2868	nan	0.1000	-0.0004
##	240	0.2622	nan	0.1000	-0.0012
##	250	0.2503	nan	0.1000	-0.0008

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2151	nan	0.1000	0.0382
##	2	1.1605	nan	0.1000	0.0249
##	3	1.1020	nan	0.1000	0.0206
##	4	1.0602	nan	0.1000	0.0178
##	5	1.0198	nan	0.1000	0.0148
##	6	0.9930	nan	0.1000	0.0099
##	7	0.9681	nan	0.1000	0.0075
##	8	0.9405	nan	0.1000	0.0059
##	9	0.9157	nan	0.1000	0.0065
##	10	0.8988	nan	0.1000	0.0032
##	20	0.7727	nan	0.1000	0.0007

##	40	0.6445	nan	0.1000	-0.0009
##	60	0.5563	nan	0.1000	-0.0025
##	80	0.4856	nan	0.1000	-0.0044
##	100	0.4263	nan	0.1000	-0.0034
##	120	0.3677	nan	0.1000	-0.0015
##	140	0.3327	nan	0.1000	-0.0027
##	160	0.3020	nan	0.1000	-0.0009
##	180	0.2719	nan	0.1000	-0.0018
##	200	0.2445	nan	0.1000	-0.0009
##	220	0.2189	nan	0.1000	-0.0007
##	240	0.1987	nan	0.1000	-0.0010
##	250	0.1891	nan	0.1000	-0.0010

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2599	nan	0.1000	0.0176
##	2	1.2322	nan	0.1000	0.0125
##	3	1.2039	nan	0.1000	0.0115
##	4	1.1815	nan	0.1000	0.0098
##	5	1.1637	nan	0.1000	0.0088
##	6	1.1446	nan	0.1000	0.0074
##	7	1.1282	nan	0.1000	0.0084
##	8	1.1110	nan	0.1000	0.0066
##	9	1.0968	nan	0.1000	0.0049
##	10	1.0860	nan	0.1000	0.0044
##	20	0.9853	nan	0.1000	0.0046
##	40	0.8966	nan	0.1000	0.0002
##	60	0.8510	nan	0.1000	-0.0003
##	80	0.8165	nan	0.1000	-0.0012
##	100	0.7945	nan	0.1000	-0.0010
##	120	0.7726	nan	0.1000	-0.0004
##	140	0.7606	nan	0.1000	-0.0014
##	160	0.7482	nan	0.1000	-0.0008
##	180	0.7349	nan	0.1000	-0.0013
##	200	0.7222	nan	0.1000	-0.0020
##	220	0.7138	nan	0.1000	-0.0011
##	240	0.7046	nan	0.1000	-0.0001
##	250	0.7008	nan	0.1000	-0.0008

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2460	nan	0.1000	0.0230
##	2	1.2030	nan	0.1000	0.0189
##	3	1.1698	nan	0.1000	0.0127
##	4	1.1389	nan	0.1000	0.0117
##	5	1.1136	nan	0.1000	0.0067
##	6	1.0940	nan	0.1000	0.0078
##	7	1.0783	nan	0.1000	0.0058
##	8	1.0619	nan	0.1000	0.0042
##	9	1.0427	nan	0.1000	0.0083
##	10	1.0226	nan	0.1000	0.0068
##	20	0.9147	nan	0.1000	0.0009
##	40	0.8112	nan	0.1000	0.0002
##	60	0.7561	nan	0.1000	-0.0012
##	80	0.7046	nan	0.1000	-0.0005
##	100	0.6729	nan	0.1000	-0.0021

##	120	0.6495	nan	0.1000	-0.0018
##	140	0.6247	nan	0.1000	-0.0010
##	160	0.6083	nan	0.1000	-0.0007
##	180	0.5827	nan	0.1000	-0.0024
##	200	0.5628	nan	0.1000	-0.0026
##	220	0.5403	nan	0.1000	-0.0026
##	240	0.5180	nan	0.1000	-0.0028
##	250	0.5083	nan	0.1000	-0.0014

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2424	nan	0.1000	0.0193
##	2	1.2071	nan	0.1000	0.0133
##	3	1.1588	nan	0.1000	0.0194
##	4	1.1216	nan	0.1000	0.0138
##	5	1.0924	nan	0.1000	0.0114
##	6	1.0661	nan	0.1000	0.0082
##	7	1.0412	nan	0.1000	0.0079
##	8	1.0206	nan	0.1000	0.0059
##	9	1.0001	nan	0.1000	0.0053
##	10	0.9818	nan	0.1000	0.0061
##	20	0.8686	nan	0.1000	-0.0005
##	40	0.7486	nan	0.1000	0.0004
##	60	0.6805	nan	0.1000	-0.0007
##	80	0.6259	nan	0.1000	-0.0027
##	100	0.5811	nan	0.1000	-0.0013
##	120	0.5413	nan	0.1000	-0.0025
##	140	0.5090	nan	0.1000	-0.0008
##	160	0.4781	nan	0.1000	-0.0022
##	180	0.4532	nan	0.1000	-0.0015
##	200	0.4244	nan	0.1000	-0.0012
##	220	0.3985	nan	0.1000	-0.0016
##	240	0.3782	nan	0.1000	-0.0012
##	250	0.3665	nan	0.1000	-0.0003

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2324	nan	0.1000	0.0282
##	2	1.1757	nan	0.1000	0.0224
##	3	1.1397	nan	0.1000	0.0157
##	4	1.0991	nan	0.1000	0.0160
##	5	1.0646	nan	0.1000	0.0108
##	6	1.0369	nan	0.1000	0.0065
##	7	1.0088	nan	0.1000	0.0104
##	8	0.9822	nan	0.1000	0.0082
##	9	0.9632	nan	0.1000	0.0037
##	10	0.9468	nan	0.1000	0.0036
##	20	0.8151	nan	0.1000	0.0016
##	40	0.6865	nan	0.1000	-0.0016
##	60	0.6129	nan	0.1000	-0.0020
##	80	0.5527	nan	0.1000	-0.0018
##	100	0.5017	nan	0.1000	-0.0002
##	120	0.4566	nan	0.1000	-0.0022
##	140	0.4116	nan	0.1000	-0.0032
##	160	0.3723	nan	0.1000	-0.0019
##	180	0.3414	nan	0.1000	-0.0014

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##      200      0.3165      nan      0.1000     -0.0014
##      220      0.2904      nan      0.1000     -0.0016
##      240      0.2686      nan      0.1000     -0.0007
##      250      0.2583      nan      0.1000     -0.0018
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2259      nan      0.1000     0.0303
##      2      1.1709      nan      0.1000     0.0250
##      3      1.1272      nan      0.1000     0.0163
##      4      1.0847      nan      0.1000     0.0183
##      5      1.0461      nan      0.1000     0.0130
##      6      1.0118      nan      0.1000     0.0134
##      7      0.9849      nan      0.1000     0.0108
##      8      0.9622      nan      0.1000     0.0075
##      9      0.9405      nan      0.1000     0.0070
##     10      0.9206      nan      0.1000     0.0052
##     20      0.7786      nan      0.1000     0.0005
##     40      0.6409      nan      0.1000    -0.0001
##     60      0.5574      nan      0.1000    -0.0028
##     80      0.4808      nan      0.1000    -0.0027
##    100      0.4220      nan      0.1000    -0.0023
##    120      0.3756      nan      0.1000    -0.0014
##    140      0.3385      nan      0.1000    -0.0015
##    160      0.3019      nan      0.1000    -0.0016
##    180      0.2724      nan      0.1000    -0.0016
##    200      0.2465      nan      0.1000    -0.0014
##    220      0.2216      nan      0.1000    -0.0011
##    240      0.2019      nan      0.1000    -0.0003
##    250      0.1924      nan      0.1000    -0.0008
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2601      nan      0.1000     0.0183
##      2      1.2216      nan      0.1000     0.0181
##      3      1.1923      nan      0.1000     0.0116
##      4      1.1665      nan      0.1000     0.0102
##      5      1.1461      nan      0.1000     0.0088
##      6      1.1264      nan      0.1000     0.0078
##      7      1.1105      nan      0.1000     0.0064
##      8      1.0941      nan      0.1000     0.0063
##      9      1.0815      nan      0.1000     0.0034
##     10      1.0699      nan      0.1000     0.0045
##     20      0.9803      nan      0.1000     0.0025
##     40      0.8942      nan      0.1000    -0.0020
##     60      0.8547      nan      0.1000     0.0000
##     80      0.8307      nan      0.1000    -0.0015
##    100      0.8126      nan      0.1000    -0.0001
##    120      0.7938      nan      0.1000    -0.0008
##    140      0.7845      nan      0.1000    -0.0026
##    160      0.7757      nan      0.1000    -0.0005
##    180      0.7655      nan      0.1000    -0.0038
##    200      0.7542      nan      0.1000    -0.0015
##    220      0.7464      nan      0.1000    -0.0011
##    240      0.7405      nan      0.1000    -0.0012
##    250      0.7367      nan      0.1000    -0.0016

```

```
##
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1         1.2516           nan         0.1000     0.0220
##      2         1.2082           nan         0.1000     0.0182
##      3         1.1711           nan         0.1000     0.0168
##      4         1.1431           nan         0.1000     0.0109
##      5         1.1155           nan         0.1000     0.0107
##      6         1.0905           nan         0.1000     0.0111
##      7         1.0667           nan         0.1000     0.0081
##      8         1.0477           nan         0.1000     0.0070
##      9         1.0278           nan         0.1000     0.0070
##     10         1.0076           nan         0.1000     0.0075
##     20         0.9079           nan         0.1000     0.0014
##     40         0.8145           nan         0.1000    -0.0008
##     60         0.7600           nan         0.1000    -0.0013
##     80         0.7278           nan         0.1000    -0.0011
##    100         0.6992           nan         0.1000    -0.0024
##    120         0.6783           nan         0.1000    -0.0016
##    140         0.6511           nan         0.1000    -0.0026
##    160         0.6278           nan         0.1000    -0.0018
##    180         0.6054           nan         0.1000    -0.0018
##    200         0.5857           nan         0.1000    -0.0019
##    220         0.5696           nan         0.1000    -0.0028
##    240         0.5548           nan         0.1000    -0.0010
##    250         0.5486           nan         0.1000    -0.0016
##
```

```
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1         1.2427           nan         0.1000     0.0214
##      2         1.1919           nan         0.1000     0.0210
##      3         1.1544           nan         0.1000     0.0123
##      4         1.1214           nan         0.1000     0.0147
##      5         1.0911           nan         0.1000     0.0112
##      6         1.0595           nan         0.1000     0.0115
##      7         1.0303           nan         0.1000     0.0124
##      8         1.0100           nan         0.1000     0.0040
##      9         0.9918           nan         0.1000     0.0051
##     10         0.9746           nan         0.1000     0.0042
##     20         0.8644           nan         0.1000    -0.0000
##     40         0.7712           nan         0.1000    -0.0016
##     60         0.7063           nan         0.1000    -0.0026
##     80         0.6548           nan         0.1000    -0.0011
##    100         0.6095           nan         0.1000    -0.0019
##    120         0.5776           nan         0.1000    -0.0015
##    140         0.5473           nan         0.1000    -0.0021
##    160         0.5206           nan         0.1000    -0.0026
##    180         0.4918           nan         0.1000    -0.0006
##    200         0.4670           nan         0.1000    -0.0020
##    220         0.4417           nan         0.1000    -0.0016
##    240         0.4134           nan         0.1000    -0.0014
##    250         0.4027           nan         0.1000    -0.0012
##
```

```
## Iter    TrainDeviance    ValidDeviance    StepSize    Improve
##      1         1.2351           nan         0.1000     0.0275
##      2         1.1814           nan         0.1000     0.0180
```


##	3	1.1291	nan	0.1000	0.0191
##	4	1.0920	nan	0.1000	0.0143
##	5	1.0601	nan	0.1000	0.0094
##	6	1.0343	nan	0.1000	0.0102
##	7	1.0078	nan	0.1000	0.0093
##	8	0.9837	nan	0.1000	0.0086
##	9	0.9640	nan	0.1000	0.0053
##	10	0.9437	nan	0.1000	0.0054
##	20	0.8342	nan	0.1000	-0.0024
##	40	0.7251	nan	0.1000	-0.0025
##	60	0.6561	nan	0.1000	-0.0038
##	80	0.5962	nan	0.1000	-0.0030
##	100	0.5383	nan	0.1000	-0.0037
##	120	0.4958	nan	0.1000	-0.0017
##	140	0.4632	nan	0.1000	-0.0026
##	160	0.4256	nan	0.1000	-0.0013
##	180	0.3956	nan	0.1000	-0.0012
##	200	0.3663	nan	0.1000	-0.0016
##	220	0.3385	nan	0.1000	-0.0014
##	240	0.3096	nan	0.1000	-0.0005
##	250	0.2972	nan	0.1000	-0.0022

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2204	nan	0.1000	0.0291
##	2	1.1650	nan	0.1000	0.0142
##	3	1.1127	nan	0.1000	0.0182
##	4	1.0745	nan	0.1000	0.0150
##	5	1.0411	nan	0.1000	0.0105
##	6	1.0091	nan	0.1000	0.0110
##	7	0.9878	nan	0.1000	0.0068
##	8	0.9574	nan	0.1000	0.0067
##	9	0.9376	nan	0.1000	0.0045
##	10	0.9168	nan	0.1000	0.0049
##	20	0.7882	nan	0.1000	0.0015
##	40	0.6646	nan	0.1000	-0.0041
##	60	0.5822	nan	0.1000	-0.0033
##	80	0.5235	nan	0.1000	-0.0017
##	100	0.4633	nan	0.1000	-0.0037
##	120	0.4200	nan	0.1000	-0.0029
##	140	0.3790	nan	0.1000	-0.0017
##	160	0.3460	nan	0.1000	-0.0014
##	180	0.3117	nan	0.1000	-0.0020
##	200	0.2849	nan	0.1000	-0.0012
##	220	0.2601	nan	0.1000	-0.0021
##	240	0.2309	nan	0.1000	-0.0013
##	250	0.2197	nan	0.1000	-0.0010

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2517	nan	0.1000	0.0213
##	2	1.2222	nan	0.1000	0.0167
##	3	1.1917	nan	0.1000	0.0123
##	4	1.1633	nan	0.1000	0.0117
##	5	1.1435	nan	0.1000	0.0090
##	6	1.1234	nan	0.1000	0.0099

##	7	1.1079	nan	0.1000	0.0036
##	8	1.0896	nan	0.1000	0.0069
##	9	1.0737	nan	0.1000	0.0072
##	10	1.0583	nan	0.1000	0.0051
##	20	0.9465	nan	0.1000	0.0031
##	40	0.8640	nan	0.1000	0.0005
##	60	0.8178	nan	0.1000	-0.0008
##	80	0.7867	nan	0.1000	-0.0016
##	100	0.7642	nan	0.1000	-0.0009
##	120	0.7468	nan	0.1000	-0.0015
##	140	0.7322	nan	0.1000	-0.0002
##	160	0.7215	nan	0.1000	-0.0012
##	180	0.7131	nan	0.1000	-0.0007
##	200	0.7029	nan	0.1000	-0.0017
##	220	0.6974	nan	0.1000	-0.0008
##	240	0.6900	nan	0.1000	-0.0013
##	250	0.6839	nan	0.1000	-0.0012

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2426	nan	0.1000	0.0229
##	2	1.1979	nan	0.1000	0.0195
##	3	1.1646	nan	0.1000	0.0137
##	4	1.1285	nan	0.1000	0.0152
##	5	1.0957	nan	0.1000	0.0125
##	6	1.0689	nan	0.1000	0.0133
##	7	1.0424	nan	0.1000	0.0108
##	8	1.0195	nan	0.1000	0.0103
##	9	1.0001	nan	0.1000	0.0075
##	10	0.9827	nan	0.1000	0.0061
##	20	0.8703	nan	0.1000	-0.0024
##	40	0.7758	nan	0.1000	-0.0018
##	60	0.7243	nan	0.1000	-0.0009
##	80	0.6898	nan	0.1000	-0.0020
##	100	0.6538	nan	0.1000	-0.0011
##	120	0.6211	nan	0.1000	-0.0007
##	140	0.5970	nan	0.1000	-0.0023
##	160	0.5722	nan	0.1000	-0.0017
##	180	0.5499	nan	0.1000	-0.0013
##	200	0.5283	nan	0.1000	-0.0016
##	220	0.5052	nan	0.1000	-0.0008
##	240	0.4842	nan	0.1000	-0.0018
##	250	0.4792	nan	0.1000	-0.0010

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2261	nan	0.1000	0.0293
##	2	1.1696	nan	0.1000	0.0224
##	3	1.1305	nan	0.1000	0.0179
##	4	1.0920	nan	0.1000	0.0158
##	5	1.0577	nan	0.1000	0.0140
##	6	1.0328	nan	0.1000	0.0107
##	7	1.0103	nan	0.1000	0.0072
##	8	0.9873	nan	0.1000	0.0076
##	9	0.9628	nan	0.1000	0.0088
##	10	0.9448	nan	0.1000	0.0056

##	20	0.8274	nan	0.1000	0.0030
##	40	0.7169	nan	0.1000	-0.0017
##	60	0.6459	nan	0.1000	-0.0016
##	80	0.5990	nan	0.1000	-0.0028
##	100	0.5620	nan	0.1000	-0.0018
##	120	0.5259	nan	0.1000	-0.0014
##	140	0.4879	nan	0.1000	-0.0020
##	160	0.4551	nan	0.1000	-0.0006
##	180	0.4287	nan	0.1000	-0.0019
##	200	0.3983	nan	0.1000	-0.0003
##	220	0.3762	nan	0.1000	-0.0011
##	240	0.3546	nan	0.1000	-0.0016
##	250	0.3438	nan	0.1000	-0.0016

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2295	nan	0.1000	0.0304
##	2	1.1691	nan	0.1000	0.0280
##	3	1.1176	nan	0.1000	0.0207
##	4	1.0721	nan	0.1000	0.0159
##	5	1.0433	nan	0.1000	0.0112
##	6	1.0093	nan	0.1000	0.0097
##	7	0.9811	nan	0.1000	0.0071
##	8	0.9581	nan	0.1000	0.0068
##	9	0.9379	nan	0.1000	0.0055
##	10	0.9161	nan	0.1000	0.0081
##	20	0.7884	nan	0.1000	0.0012
##	40	0.6680	nan	0.1000	-0.0011
##	60	0.5844	nan	0.1000	-0.0023
##	80	0.5212	nan	0.1000	-0.0027
##	100	0.4669	nan	0.1000	-0.0012
##	120	0.4287	nan	0.1000	-0.0021
##	140	0.3916	nan	0.1000	-0.0022
##	160	0.3582	nan	0.1000	-0.0002
##	180	0.3303	nan	0.1000	-0.0019
##	200	0.3064	nan	0.1000	-0.0011
##	220	0.2835	nan	0.1000	-0.0013
##	240	0.2630	nan	0.1000	-0.0008
##	250	0.2515	nan	0.1000	-0.0008

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2240	nan	0.1000	0.0286
##	2	1.1680	nan	0.1000	0.0194
##	3	1.1143	nan	0.1000	0.0234
##	4	1.0684	nan	0.1000	0.0163
##	5	1.0287	nan	0.1000	0.0144
##	6	0.9962	nan	0.1000	0.0071
##	7	0.9679	nan	0.1000	0.0045
##	8	0.9418	nan	0.1000	0.0123
##	9	0.9238	nan	0.1000	0.0043
##	10	0.8983	nan	0.1000	0.0069
##	20	0.7520	nan	0.1000	-0.0012
##	40	0.6128	nan	0.1000	-0.0025
##	60	0.5192	nan	0.1000	-0.0020
##	80	0.4546	nan	0.1000	-0.0032

##	100	0.4022	nan	0.1000	-0.0032
##	120	0.3590	nan	0.1000	-0.0010
##	140	0.3190	nan	0.1000	-0.0025
##	160	0.2871	nan	0.1000	-0.0023
##	180	0.2652	nan	0.1000	-0.0011
##	200	0.2409	nan	0.1000	-0.0008
##	220	0.2185	nan	0.1000	-0.0013
##	240	0.1958	nan	0.1000	-0.0013
##	250	0.1865	nan	0.1000	-0.0017

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2528	nan	0.1000	0.0183
##	2	1.2212	nan	0.1000	0.0149
##	3	1.1951	nan	0.1000	0.0133
##	4	1.1700	nan	0.1000	0.0093
##	5	1.1484	nan	0.1000	0.0095
##	6	1.1265	nan	0.1000	0.0069
##	7	1.1091	nan	0.1000	0.0087
##	8	1.0944	nan	0.1000	0.0064
##	9	1.0815	nan	0.1000	0.0045
##	10	1.0712	nan	0.1000	0.0038
##	20	0.9725	nan	0.1000	0.0010
##	40	0.8911	nan	0.1000	0.0005
##	60	0.8412	nan	0.1000	-0.0020
##	80	0.8149	nan	0.1000	-0.0007
##	100	0.7972	nan	0.1000	-0.0010
##	120	0.7812	nan	0.1000	-0.0014
##	140	0.7702	nan	0.1000	-0.0024
##	160	0.7612	nan	0.1000	-0.0025
##	180	0.7544	nan	0.1000	-0.0044
##	200	0.7406	nan	0.1000	-0.0016
##	220	0.7298	nan	0.1000	-0.0015
##	240	0.7257	nan	0.1000	-0.0010
##	250	0.7224	nan	0.1000	-0.0005

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2476	nan	0.1000	0.0208
##	2	1.2069	nan	0.1000	0.0175
##	3	1.1613	nan	0.1000	0.0198
##	4	1.1313	nan	0.1000	0.0161
##	5	1.1063	nan	0.1000	0.0079
##	6	1.0810	nan	0.1000	0.0115
##	7	1.0579	nan	0.1000	0.0069
##	8	1.0366	nan	0.1000	0.0099
##	9	1.0199	nan	0.1000	0.0035
##	10	1.0039	nan	0.1000	0.0024
##	20	0.8994	nan	0.1000	0.0001
##	40	0.8100	nan	0.1000	-0.0005
##	60	0.7599	nan	0.1000	-0.0014
##	80	0.7244	nan	0.1000	-0.0043
##	100	0.6937	nan	0.1000	-0.0020
##	120	0.6677	nan	0.1000	-0.0026
##	140	0.6464	nan	0.1000	-0.0014
##	160	0.6256	nan	0.1000	-0.0007

##	180	0.6040	nan	0.1000	-0.0010
##	200	0.5825	nan	0.1000	-0.0006
##	220	0.5614	nan	0.1000	-0.0006
##	240	0.5430	nan	0.1000	-0.0002
##	250	0.5335	nan	0.1000	-0.0018

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2388	nan	0.1000	0.0239
##	2	1.1837	nan	0.1000	0.0239
##	3	1.1372	nan	0.1000	0.0182
##	4	1.1027	nan	0.1000	0.0140
##	5	1.0692	nan	0.1000	0.0094
##	6	1.0419	nan	0.1000	0.0080
##	7	1.0187	nan	0.1000	0.0085
##	8	0.9974	nan	0.1000	0.0054
##	9	0.9826	nan	0.1000	0.0054
##	10	0.9667	nan	0.1000	0.0043
##	20	0.8500	nan	0.1000	0.0018
##	40	0.7575	nan	0.1000	-0.0024
##	60	0.6970	nan	0.1000	-0.0030
##	80	0.6456	nan	0.1000	-0.0015
##	100	0.6067	nan	0.1000	-0.0020
##	120	0.5705	nan	0.1000	-0.0015
##	140	0.5365	nan	0.1000	-0.0020
##	160	0.5101	nan	0.1000	-0.0027
##	180	0.4793	nan	0.1000	-0.0019
##	200	0.4466	nan	0.1000	-0.0023
##	220	0.4254	nan	0.1000	-0.0009
##	240	0.4005	nan	0.1000	-0.0026
##	250	0.3894	nan	0.1000	-0.0010

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2252	nan	0.1000	0.0313
##	2	1.1709	nan	0.1000	0.0221
##	3	1.1310	nan	0.1000	0.0159
##	4	1.0970	nan	0.1000	0.0098
##	5	1.0628	nan	0.1000	0.0129
##	6	1.0338	nan	0.1000	0.0085
##	7	1.0053	nan	0.1000	0.0107
##	8	0.9858	nan	0.1000	0.0071
##	9	0.9639	nan	0.1000	0.0067
##	10	0.9470	nan	0.1000	0.0022
##	20	0.8283	nan	0.1000	-0.0002
##	40	0.7137	nan	0.1000	-0.0026
##	60	0.6368	nan	0.1000	-0.0043
##	80	0.5788	nan	0.1000	-0.0014
##	100	0.5337	nan	0.1000	-0.0025
##	120	0.4868	nan	0.1000	-0.0024
##	140	0.4511	nan	0.1000	-0.0018
##	160	0.4218	nan	0.1000	-0.0029
##	180	0.3839	nan	0.1000	-0.0011
##	200	0.3556	nan	0.1000	-0.0012
##	220	0.3276	nan	0.1000	-0.0003
##	240	0.3063	nan	0.1000	-0.0009

```

##      250      0.2950      nan      0.1000     -0.0007
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2308      nan      0.1000     0.0279
##      2      1.1743      nan      0.1000     0.0233
##      3      1.1242      nan      0.1000     0.0195
##      4      1.0835      nan      0.1000     0.0143
##      5      1.0497      nan      0.1000     0.0107
##      6      1.0198      nan      0.1000     0.0101
##      7      0.9938      nan      0.1000     0.0081
##      8      0.9631      nan      0.1000     0.0122
##      9      0.9413      nan      0.1000     0.0069
##     10      0.9240      nan      0.1000     0.0029
##     20      0.7894      nan      0.1000    -0.0009
##     40      0.6620      nan      0.1000    -0.0004
##     60      0.5772      nan      0.1000    -0.0029
##     80      0.5149      nan      0.1000    -0.0026
##    100      0.4590      nan      0.1000    -0.0027
##    120      0.4091      nan      0.1000    -0.0019
##    140      0.3646      nan      0.1000    -0.0022
##    160      0.3283      nan      0.1000    -0.0014
##    180      0.2999      nan      0.1000    -0.0011
##    200      0.2698      nan      0.1000    -0.0014
##    220      0.2461      nan      0.1000    -0.0008
##    240      0.2225      nan      0.1000    -0.0018
##    250      0.2122      nan      0.1000    -0.0016
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2547      nan      0.1000     0.0171
##      2      1.2212      nan      0.1000     0.0120
##      3      1.1941      nan      0.1000     0.0145
##      4      1.1813      nan      0.1000     0.0019
##      5      1.1555      nan      0.1000     0.0122
##      6      1.1385      nan      0.1000     0.0072
##      7      1.1165      nan      0.1000     0.0076
##      8      1.0981      nan      0.1000     0.0075
##      9      1.0823      nan      0.1000     0.0053
##     10      1.0643      nan      0.1000     0.0064
##     20      0.9640      nan      0.1000     0.0018
##     40      0.8802      nan      0.1000     0.0016
##     60      0.8329      nan      0.1000    -0.0015
##     80      0.8091      nan      0.1000     0.0001
##    100      0.7883      nan      0.1000    -0.0017
##    120      0.7715      nan      0.1000    -0.0018
##    140      0.7588      nan      0.1000    -0.0019
##    160      0.7467      nan      0.1000    -0.0005
##    180      0.7347      nan      0.1000    -0.0006
##    200      0.7272      nan      0.1000    -0.0011
##    220      0.7231      nan      0.1000    -0.0006
##    240      0.7143      nan      0.1000    -0.0010
##    250      0.7094      nan      0.1000    -0.0007
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2413      nan      0.1000     0.0237

```

##	2	1.1994	nan	0.1000	0.0187
##	3	1.1678	nan	0.1000	0.0122
##	4	1.1341	nan	0.1000	0.0140
##	5	1.1023	nan	0.1000	0.0139
##	6	1.0795	nan	0.1000	0.0093
##	7	1.0556	nan	0.1000	0.0108
##	8	1.0371	nan	0.1000	0.0075
##	9	1.0167	nan	0.1000	0.0066
##	10	1.0022	nan	0.1000	0.0039
##	20	0.8965	nan	0.1000	-0.0017
##	40	0.7983	nan	0.1000	-0.0007
##	60	0.7448	nan	0.1000	-0.0014
##	80	0.7088	nan	0.1000	-0.0007
##	100	0.6758	nan	0.1000	-0.0005
##	120	0.6506	nan	0.1000	-0.0028
##	140	0.6222	nan	0.1000	-0.0015
##	160	0.5994	nan	0.1000	-0.0014
##	180	0.5803	nan	0.1000	-0.0009
##	200	0.5569	nan	0.1000	-0.0046
##	220	0.5382	nan	0.1000	-0.0013
##	240	0.5169	nan	0.1000	-0.0020
##	250	0.5074	nan	0.1000	-0.0014

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2355	nan	0.1000	0.0233
##	2	1.1925	nan	0.1000	0.0179
##	3	1.1538	nan	0.1000	0.0157
##	4	1.1110	nan	0.1000	0.0175
##	5	1.0774	nan	0.1000	0.0153
##	6	1.0488	nan	0.1000	0.0101
##	7	1.0260	nan	0.1000	0.0074
##	8	1.0030	nan	0.1000	0.0086
##	9	0.9828	nan	0.1000	0.0073
##	10	0.9685	nan	0.1000	0.0013
##	20	0.8497	nan	0.1000	-0.0022
##	40	0.7536	nan	0.1000	-0.0010
##	60	0.6828	nan	0.1000	-0.0026
##	80	0.6348	nan	0.1000	-0.0020
##	100	0.5885	nan	0.1000	-0.0012
##	120	0.5562	nan	0.1000	-0.0021
##	140	0.5204	nan	0.1000	-0.0026
##	160	0.4885	nan	0.1000	-0.0025
##	180	0.4580	nan	0.1000	-0.0018
##	200	0.4332	nan	0.1000	-0.0014
##	220	0.4109	nan	0.1000	-0.0012
##	240	0.3882	nan	0.1000	-0.0012
##	250	0.3781	nan	0.1000	-0.0020

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2268	nan	0.1000	0.0287
##	2	1.1718	nan	0.1000	0.0193
##	3	1.1260	nan	0.1000	0.0165
##	4	1.0836	nan	0.1000	0.0179
##	5	1.0491	nan	0.1000	0.0120

##	6	1.0226	nan	0.1000	0.0056
##	7	0.9916	nan	0.1000	0.0113
##	8	0.9644	nan	0.1000	0.0071
##	9	0.9452	nan	0.1000	0.0006
##	10	0.9290	nan	0.1000	-0.0002
##	20	0.8069	nan	0.1000	-0.0014
##	40	0.6904	nan	0.1000	-0.0015
##	60	0.6216	nan	0.1000	-0.0037
##	80	0.5553	nan	0.1000	-0.0020
##	100	0.5004	nan	0.1000	-0.0025
##	120	0.4531	nan	0.1000	-0.0004
##	140	0.4174	nan	0.1000	-0.0016
##	160	0.3818	nan	0.1000	-0.0008
##	180	0.3464	nan	0.1000	-0.0016
##	200	0.3170	nan	0.1000	-0.0021
##	220	0.2880	nan	0.1000	-0.0013
##	240	0.2688	nan	0.1000	-0.0014
##	250	0.2605	nan	0.1000	-0.0009

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2245	nan	0.1000	0.0302
##	2	1.1611	nan	0.1000	0.0256
##	3	1.1145	nan	0.1000	0.0193
##	4	1.0781	nan	0.1000	0.0110
##	5	1.0437	nan	0.1000	0.0125
##	6	1.0079	nan	0.1000	0.0145
##	7	0.9807	nan	0.1000	0.0073
##	8	0.9566	nan	0.1000	0.0074
##	9	0.9308	nan	0.1000	0.0097
##	10	0.9134	nan	0.1000	0.0043
##	20	0.7643	nan	0.1000	0.0008
##	40	0.6415	nan	0.1000	-0.0032
##	60	0.5433	nan	0.1000	-0.0012
##	80	0.4798	nan	0.1000	-0.0035
##	100	0.4171	nan	0.1000	-0.0011
##	120	0.3758	nan	0.1000	-0.0009
##	140	0.3325	nan	0.1000	-0.0014
##	160	0.2944	nan	0.1000	-0.0014
##	180	0.2627	nan	0.1000	-0.0019
##	200	0.2367	nan	0.1000	-0.0017
##	220	0.2156	nan	0.1000	-0.0011
##	240	0.1966	nan	0.1000	-0.0010
##	250	0.1879	nan	0.1000	-0.0008

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2577	nan	0.1000	0.0155
##	2	1.2234	nan	0.1000	0.0142
##	3	1.1954	nan	0.1000	0.0101
##	4	1.1725	nan	0.1000	0.0095
##	5	1.1530	nan	0.1000	0.0070
##	6	1.1325	nan	0.1000	0.0073
##	7	1.1162	nan	0.1000	0.0056
##	8	1.0999	nan	0.1000	0.0053
##	9	1.0829	nan	0.1000	0.0053

##	10	1.0713	nan	0.1000	0.0050
##	20	0.9861	nan	0.1000	0.0012
##	40	0.9098	nan	0.1000	-0.0008
##	60	0.8702	nan	0.1000	-0.0008
##	80	0.8426	nan	0.1000	-0.0003
##	100	0.8172	nan	0.1000	-0.0023
##	120	0.7993	nan	0.1000	-0.0012
##	140	0.7876	nan	0.1000	-0.0025
##	160	0.7776	nan	0.1000	-0.0006
##	180	0.7698	nan	0.1000	-0.0006
##	200	0.7613	nan	0.1000	-0.0010
##	220	0.7514	nan	0.1000	-0.0012
##	240	0.7400	nan	0.1000	-0.0008
##	250	0.7348	nan	0.1000	-0.0006

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2501	nan	0.1000	0.0213
##	2	1.2070	nan	0.1000	0.0178
##	3	1.1740	nan	0.1000	0.0175
##	4	1.1460	nan	0.1000	0.0095
##	5	1.1226	nan	0.1000	0.0059
##	6	1.0948	nan	0.1000	0.0108
##	7	1.0708	nan	0.1000	0.0100
##	8	1.0514	nan	0.1000	0.0069
##	9	1.0385	nan	0.1000	0.0020
##	10	1.0248	nan	0.1000	-0.0004
##	20	0.9180	nan	0.1000	0.0011
##	40	0.8245	nan	0.1000	-0.0008
##	60	0.7719	nan	0.1000	0.0012
##	80	0.7338	nan	0.1000	-0.0028
##	100	0.7041	nan	0.1000	-0.0017
##	120	0.6807	nan	0.1000	-0.0011
##	140	0.6540	nan	0.1000	-0.0028
##	160	0.6367	nan	0.1000	-0.0014
##	180	0.6131	nan	0.1000	-0.0010
##	200	0.5885	nan	0.1000	-0.0013
##	220	0.5693	nan	0.1000	-0.0010
##	240	0.5545	nan	0.1000	-0.0018
##	250	0.5441	nan	0.1000	-0.0018

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2407	nan	0.1000	0.0180
##	2	1.1929	nan	0.1000	0.0172
##	3	1.1534	nan	0.1000	0.0155
##	4	1.1193	nan	0.1000	0.0149
##	5	1.0830	nan	0.1000	0.0145
##	6	1.0606	nan	0.1000	0.0074
##	7	1.0364	nan	0.1000	0.0090
##	8	1.0155	nan	0.1000	0.0053
##	9	0.9949	nan	0.1000	0.0067
##	10	0.9762	nan	0.1000	0.0026
##	20	0.8757	nan	0.1000	0.0003
##	40	0.7693	nan	0.1000	-0.0001
##	60	0.7040	nan	0.1000	-0.0028

##	80	0.6661	nan	0.1000	-0.0034
##	100	0.6199	nan	0.1000	-0.0029
##	120	0.5828	nan	0.1000	-0.0009
##	140	0.5500	nan	0.1000	-0.0016
##	160	0.5205	nan	0.1000	-0.0030
##	180	0.4923	nan	0.1000	-0.0013
##	200	0.4682	nan	0.1000	-0.0019
##	220	0.4416	nan	0.1000	-0.0009
##	240	0.4165	nan	0.1000	-0.0012
##	250	0.4023	nan	0.1000	-0.0011

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2366	nan	0.1000	0.0261
##	2	1.1861	nan	0.1000	0.0231
##	3	1.1426	nan	0.1000	0.0211
##	4	1.1024	nan	0.1000	0.0175
##	5	1.0722	nan	0.1000	0.0090
##	6	1.0416	nan	0.1000	0.0107
##	7	1.0166	nan	0.1000	0.0067
##	8	0.9947	nan	0.1000	0.0073
##	9	0.9705	nan	0.1000	0.0095
##	10	0.9481	nan	0.1000	0.0073
##	20	0.8226	nan	0.1000	0.0007
##	40	0.7116	nan	0.1000	-0.0002
##	60	0.6393	nan	0.1000	-0.0028
##	80	0.5717	nan	0.1000	-0.0024
##	100	0.5205	nan	0.1000	-0.0009
##	120	0.4749	nan	0.1000	-0.0032
##	140	0.4418	nan	0.1000	-0.0010
##	160	0.4071	nan	0.1000	-0.0018
##	180	0.3744	nan	0.1000	-0.0007
##	200	0.3459	nan	0.1000	-0.0025
##	220	0.3217	nan	0.1000	-0.0014
##	240	0.2962	nan	0.1000	-0.0015
##	250	0.2857	nan	0.1000	-0.0017

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2339	nan	0.1000	0.0231
##	2	1.1763	nan	0.1000	0.0192
##	3	1.1280	nan	0.1000	0.0183
##	4	1.0920	nan	0.1000	0.0122
##	5	1.0541	nan	0.1000	0.0163
##	6	1.0248	nan	0.1000	0.0124
##	7	0.9961	nan	0.1000	0.0061
##	8	0.9710	nan	0.1000	0.0066
##	9	0.9485	nan	0.1000	0.0061
##	10	0.9270	nan	0.1000	0.0058
##	20	0.7824	nan	0.1000	-0.0015
##	40	0.6552	nan	0.1000	-0.0017
##	60	0.5746	nan	0.1000	-0.0023
##	80	0.5013	nan	0.1000	-0.0009
##	100	0.4415	nan	0.1000	-0.0012
##	120	0.3957	nan	0.1000	-0.0018
##	140	0.3541	nan	0.1000	-0.0016

##	160	0.3206	nan	0.1000	-0.0013
##	180	0.2868	nan	0.1000	-0.0011
##	200	0.2614	nan	0.1000	-0.0007
##	220	0.2376	nan	0.1000	-0.0014
##	240	0.2167	nan	0.1000	-0.0013
##	250	0.2059	nan	0.1000	-0.0007

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2537	nan	0.1000	0.0176
##	2	1.2189	nan	0.1000	0.0162
##	3	1.1901	nan	0.1000	0.0132
##	4	1.1646	nan	0.1000	0.0093
##	5	1.1419	nan	0.1000	0.0076
##	6	1.1225	nan	0.1000	0.0057
##	7	1.1046	nan	0.1000	0.0081
##	8	1.0879	nan	0.1000	0.0053
##	9	1.0691	nan	0.1000	0.0077
##	10	1.0530	nan	0.1000	0.0056
##	20	0.9570	nan	0.1000	0.0009
##	40	0.8660	nan	0.1000	0.0005
##	60	0.8198	nan	0.1000	-0.0006
##	80	0.7949	nan	0.1000	-0.0015
##	100	0.7737	nan	0.1000	-0.0003
##	120	0.7636	nan	0.1000	-0.0013
##	140	0.7539	nan	0.1000	-0.0010
##	160	0.7422	nan	0.1000	-0.0012
##	180	0.7317	nan	0.1000	-0.0009
##	200	0.7273	nan	0.1000	-0.0008
##	220	0.7181	nan	0.1000	-0.0016
##	240	0.7130	nan	0.1000	-0.0013
##	250	0.7096	nan	0.1000	-0.0028

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2471	nan	0.1000	0.0237
##	2	1.2084	nan	0.1000	0.0180
##	3	1.1682	nan	0.1000	0.0152
##	4	1.1329	nan	0.1000	0.0155
##	5	1.1021	nan	0.1000	0.0122
##	6	1.0747	nan	0.1000	0.0079
##	7	1.0537	nan	0.1000	0.0066
##	8	1.0341	nan	0.1000	0.0084
##	9	1.0137	nan	0.1000	0.0086
##	10	0.9943	nan	0.1000	0.0075
##	20	0.8836	nan	0.1000	0.0020
##	40	0.7949	nan	0.1000	-0.0022
##	60	0.7445	nan	0.1000	-0.0009
##	80	0.7084	nan	0.1000	-0.0020
##	100	0.6797	nan	0.1000	-0.0009
##	120	0.6572	nan	0.1000	-0.0028
##	140	0.6279	nan	0.1000	-0.0020
##	160	0.6101	nan	0.1000	-0.0011
##	180	0.5849	nan	0.1000	-0.0022
##	200	0.5652	nan	0.1000	-0.0015
##	220	0.5467	nan	0.1000	-0.0020

```

##      240      0.5287      nan      0.1000     -0.0003
##      250      0.5214      nan      0.1000     -0.0005
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2361      nan      0.1000     0.0263
##      2      1.1842      nan      0.1000     0.0222
##      3      1.1424      nan      0.1000     0.0161
##      4      1.1015      nan      0.1000     0.0134
##      5      1.0671      nan      0.1000     0.0131
##      6      1.0410      nan      0.1000     0.0110
##      7      1.0163      nan      0.1000     0.0069
##      8      0.9964      nan      0.1000     0.0067
##      9      0.9806      nan      0.1000     0.0041
##     10      0.9573      nan      0.1000     0.0070
##     20      0.8386      nan      0.1000    -0.0007
##     40      0.7326      nan      0.1000    -0.0021
##     60      0.6759      nan      0.1000    -0.0044
##     80      0.6271      nan      0.1000    -0.0031
##    100      0.5856      nan      0.1000    -0.0028
##    120      0.5496      nan      0.1000    -0.0029
##    140      0.5163      nan      0.1000    -0.0014
##    160      0.4880      nan      0.1000    -0.0016
##    180      0.4567      nan      0.1000    -0.0012
##    200      0.4246      nan      0.1000    -0.0012
##    220      0.3982      nan      0.1000    -0.0004
##    240      0.3777      nan      0.1000    -0.0012
##    250      0.3682      nan      0.1000    -0.0007
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve
##      1      1.2341      nan      0.1000     0.0308
##      2      1.1858      nan      0.1000     0.0223
##      3      1.1308      nan      0.1000     0.0242
##      4      1.0936      nan      0.1000     0.0150
##      5      1.0612      nan      0.1000     0.0104
##      6      1.0296      nan      0.1000     0.0066
##      7      1.0022      nan      0.1000     0.0092
##      8      0.9773      nan      0.1000     0.0076
##      9      0.9553      nan      0.1000     0.0049
##     10      0.9381      nan      0.1000     0.0052
##     20      0.8122      nan      0.1000    -0.0013
##     40      0.6934      nan      0.1000    -0.0031
##     60      0.6342      nan      0.1000    -0.0033
##     80      0.5685      nan      0.1000    -0.0055
##    100      0.5174      nan      0.1000    -0.0020
##    120      0.4722      nan      0.1000    -0.0025
##    140      0.4315      nan      0.1000    -0.0037
##    160      0.3943      nan      0.1000    -0.0017
##    180      0.3638      nan      0.1000    -0.0016
##    200      0.3320      nan      0.1000    -0.0002
##    220      0.3087      nan      0.1000    -0.0017
##    240      0.2825      nan      0.1000    -0.0009
##    250      0.2731      nan      0.1000    -0.0010
##
## Iter   TrainDeviance   ValidDeviance   StepSize   Improve

```

##	1	1.2242	nan	0.1000	0.0306
##	2	1.1616	nan	0.1000	0.0276
##	3	1.1128	nan	0.1000	0.0201
##	4	1.0728	nan	0.1000	0.0140
##	5	1.0343	nan	0.1000	0.0135
##	6	1.0000	nan	0.1000	0.0096
##	7	0.9730	nan	0.1000	0.0068
##	8	0.9501	nan	0.1000	0.0065
##	9	0.9278	nan	0.1000	0.0063
##	10	0.9059	nan	0.1000	0.0036
##	20	0.7673	nan	0.1000	0.0011
##	40	0.6325	nan	0.1000	-0.0011
##	60	0.5448	nan	0.1000	-0.0038
##	80	0.4810	nan	0.1000	-0.0014
##	100	0.4219	nan	0.1000	-0.0015
##	120	0.3770	nan	0.1000	-0.0018
##	140	0.3394	nan	0.1000	-0.0017
##	160	0.3024	nan	0.1000	-0.0004
##	180	0.2734	nan	0.1000	-0.0004
##	200	0.2475	nan	0.1000	-0.0008
##	220	0.2267	nan	0.1000	-0.0010
##	240	0.2051	nan	0.1000	-0.0009
##	250	0.1972	nan	0.1000	-0.0012

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2582	nan	0.1000	0.0137
##	2	1.2349	nan	0.1000	0.0111
##	3	1.2103	nan	0.1000	0.0109
##	4	1.1848	nan	0.1000	0.0118
##	5	1.1682	nan	0.1000	0.0079
##	6	1.1493	nan	0.1000	0.0091
##	7	1.1325	nan	0.1000	0.0068
##	8	1.1156	nan	0.1000	0.0066
##	9	1.1013	nan	0.1000	0.0064
##	10	1.0870	nan	0.1000	0.0072
##	20	0.9884	nan	0.1000	0.0025
##	40	0.8916	nan	0.1000	0.0010
##	60	0.8472	nan	0.1000	-0.0021
##	80	0.8202	nan	0.1000	-0.0011
##	100	0.7955	nan	0.1000	-0.0010
##	120	0.7743	nan	0.1000	-0.0004
##	140	0.7568	nan	0.1000	-0.0004
##	160	0.7458	nan	0.1000	-0.0019
##	180	0.7353	nan	0.1000	-0.0009
##	200	0.7253	nan	0.1000	-0.0007
##	220	0.7177	nan	0.1000	-0.0024
##	240	0.7065	nan	0.1000	-0.0018
##	250	0.7012	nan	0.1000	0.0003

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2524	nan	0.1000	0.0189
##	2	1.2149	nan	0.1000	0.0172
##	3	1.1823	nan	0.1000	0.0131
##	4	1.1514	nan	0.1000	0.0135

##	5	1.1305	nan	0.1000	0.0059
##	6	1.1040	nan	0.1000	0.0126
##	7	1.0828	nan	0.1000	0.0083
##	8	1.0627	nan	0.1000	0.0076
##	9	1.0389	nan	0.1000	0.0106
##	10	1.0226	nan	0.1000	0.0069
##	20	0.9065	nan	0.1000	0.0003
##	40	0.8019	nan	0.1000	-0.0008
##	60	0.7566	nan	0.1000	-0.0024
##	80	0.7115	nan	0.1000	0.0002
##	100	0.6831	nan	0.1000	-0.0006
##	120	0.6535	nan	0.1000	-0.0008
##	140	0.6287	nan	0.1000	-0.0022
##	160	0.6035	nan	0.1000	-0.0014
##	180	0.5828	nan	0.1000	-0.0027
##	200	0.5622	nan	0.1000	-0.0012
##	220	0.5428	nan	0.1000	-0.0007
##	240	0.5228	nan	0.1000	-0.0012
##	250	0.5128	nan	0.1000	-0.0012

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2405	nan	0.1000	0.0245
##	2	1.1934	nan	0.1000	0.0169
##	3	1.1540	nan	0.1000	0.0166
##	4	1.1180	nan	0.1000	0.0163
##	5	1.0866	nan	0.1000	0.0123
##	6	1.0607	nan	0.1000	0.0088
##	7	1.0385	nan	0.1000	0.0056
##	8	1.0148	nan	0.1000	0.0079
##	9	0.9932	nan	0.1000	0.0078
##	10	0.9769	nan	0.1000	0.0033
##	20	0.8515	nan	0.1000	0.0018
##	40	0.7377	nan	0.1000	-0.0013
##	60	0.6715	nan	0.1000	-0.0008
##	80	0.6224	nan	0.1000	-0.0021
##	100	0.5822	nan	0.1000	-0.0024
##	120	0.5441	nan	0.1000	-0.0010
##	140	0.5116	nan	0.1000	-0.0026
##	160	0.4832	nan	0.1000	-0.0011
##	180	0.4526	nan	0.1000	-0.0015
##	200	0.4265	nan	0.1000	-0.0022
##	220	0.4004	nan	0.1000	-0.0027
##	240	0.3781	nan	0.1000	-0.0021
##	250	0.3652	nan	0.1000	-0.0017

##

##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2374	nan	0.1000	0.0224
##	2	1.1823	nan	0.1000	0.0208
##	3	1.1301	nan	0.1000	0.0222
##	4	1.0907	nan	0.1000	0.0181
##	5	1.0615	nan	0.1000	0.0071
##	6	1.0337	nan	0.1000	0.0093
##	7	1.0050	nan	0.1000	0.0098
##	8	0.9848	nan	0.1000	0.0077

##	9	0.9660	nan	0.1000	0.0041
##	10	0.9465	nan	0.1000	0.0029
##	20	0.8228	nan	0.1000	0.0008
##	40	0.7013	nan	0.1000	-0.0031
##	60	0.6209	nan	0.1000	-0.0045
##	80	0.5500	nan	0.1000	-0.0020
##	100	0.4977	nan	0.1000	-0.0008
##	120	0.4580	nan	0.1000	-0.0021
##	140	0.4135	nan	0.1000	-0.0009
##	160	0.3823	nan	0.1000	-0.0016
##	180	0.3464	nan	0.1000	-0.0016
##	200	0.3230	nan	0.1000	-0.0019
##	220	0.3005	nan	0.1000	-0.0012
##	240	0.2787	nan	0.1000	-0.0023
##	250	0.2685	nan	0.1000	-0.0010

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2259	nan	0.1000	0.0237
##	2	1.1778	nan	0.1000	0.0180
##	3	1.1276	nan	0.1000	0.0209
##	4	1.0911	nan	0.1000	0.0136
##	5	1.0570	nan	0.1000	0.0085
##	6	1.0261	nan	0.1000	0.0097
##	7	0.9961	nan	0.1000	0.0121
##	8	0.9745	nan	0.1000	0.0060
##	9	0.9491	nan	0.1000	0.0079
##	10	0.9269	nan	0.1000	0.0064
##	20	0.7840	nan	0.1000	-0.0034
##	40	0.6489	nan	0.1000	-0.0017
##	60	0.5676	nan	0.1000	-0.0010
##	80	0.4987	nan	0.1000	-0.0021
##	100	0.4424	nan	0.1000	-0.0015
##	120	0.3955	nan	0.1000	-0.0030
##	140	0.3524	nan	0.1000	-0.0019
##	160	0.3160	nan	0.1000	-0.0027
##	180	0.2827	nan	0.1000	-0.0017
##	200	0.2591	nan	0.1000	-0.0015
##	220	0.2336	nan	0.1000	-0.0011
##	240	0.2114	nan	0.1000	-0.0003
##	250	0.2031	nan	0.1000	-0.0015

##					
##	Iter	TrainDeviance	ValidDeviance	StepSize	Improve
##	1	1.2540	nan	0.1000	0.0165
##	2	1.2293	nan	0.1000	0.0113
##	3	1.2023	nan	0.1000	0.0131
##	4	1.1746	nan	0.1000	0.0117
##	5	1.1546	nan	0.1000	0.0064
##	6	1.1337	nan	0.1000	0.0088
##	7	1.1183	nan	0.1000	0.0068
##	8	1.1029	nan	0.1000	0.0069
##	9	1.0910	nan	0.1000	0.0035
##	10	1.0774	nan	0.1000	0.0054
##	20	0.9755	nan	0.1000	0.0025
##	40	0.8921	nan	0.1000	-0.0006

##	60	0.8508	nan	0.1000	0.0001
##	80	0.8244	nan	0.1000	-0.0005
##	100	0.8067	nan	0.1000	-0.0026

```
boost.total.time = proc.time() - boost.start.time  
boost.total.time[3]
```

```
## elapsed  
## 25.33
```

```
gbmFit
```



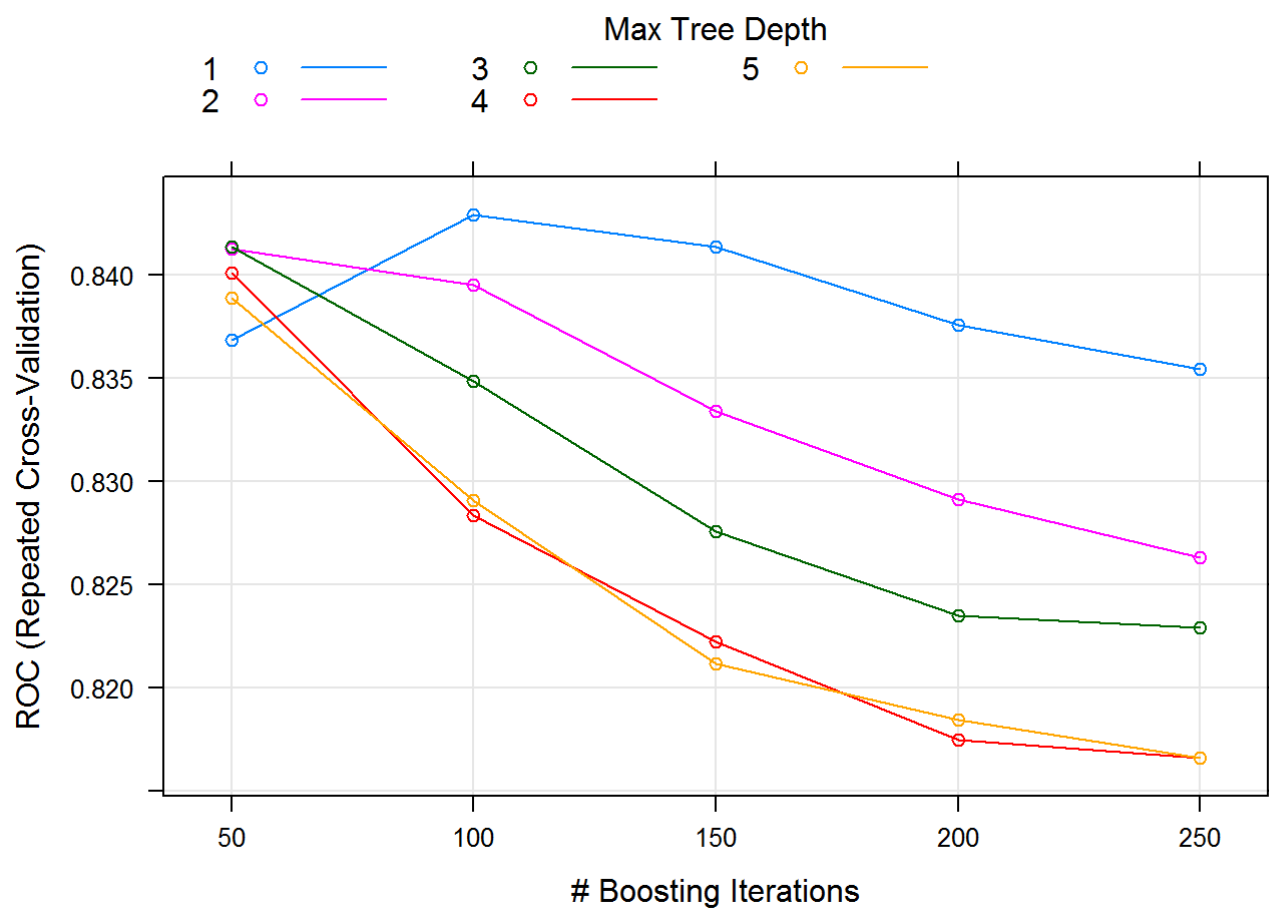
```

## Stochastic Gradient Boosting
##
## 538 samples
## 8 predictor
## 2 classes: 'N', 'Y'
##
## Pre-processing: centered (8), scaled (8)
## Resampling: Cross-Validated (10 fold, repeated 5 times)
## Summary of sample sizes: 484, 484, 484, 484, 484, 484, ...
## Resampling results across tuning parameters:
##
## interaction.depth n.trees ROC Sens Spec ROC SD
## 1 50 0.8368705 0.8811429 0.5514620 0.05146112
## 1 100 0.8429173 0.8731429 0.5774269 0.04953678
## 1 150 0.8413952 0.8588571 0.5698830 0.05002629
## 1 200 0.8376040 0.8571429 0.5761404 0.05213550
## 1 250 0.8354520 0.8520000 0.5749123 0.05298436
## 2 50 0.8412865 0.8691429 0.5761988 0.04906393
## 2 100 0.8395188 0.8462857 0.5881287 0.05152655
## 2 150 0.8333868 0.8382857 0.5932164 0.05377491
## 2 200 0.8291546 0.8308571 0.5847953 0.05243689
## 2 250 0.8263141 0.8285714 0.5912865 0.05571766
## 3 50 0.8413935 0.8588571 0.5943860 0.04953792
## 3 100 0.8348755 0.8405714 0.5965497 0.05253429
## 3 150 0.8275873 0.8348571 0.5880117 0.05418476
## 3 200 0.8235038 0.8234286 0.5955556 0.05381470
## 3 250 0.8229056 0.8257143 0.5971930 0.05527243
## 4 50 0.8401086 0.8520000 0.5961404 0.05369524
## 4 100 0.8283392 0.8291429 0.5950292 0.05072324
## 4 150 0.8222473 0.8291429 0.5995322 0.05515090
## 4 200 0.8174787 0.8240000 0.5983041 0.05993844
## 4 250 0.8166032 0.8245714 0.5856725 0.05785680
## 5 50 0.8389140 0.8457143 0.5994737 0.04722114
## 5 100 0.8291078 0.8342857 0.5972515 0.05290687
## 5 150 0.8211997 0.8308571 0.5865497 0.05755287
## 5 200 0.8184595 0.8251429 0.6005263 0.05585512
## 5 250 0.8166316 0.8245714 0.5961988 0.05696081
## Sens SD Spec SD
## 0.04910189 0.11888702
## 0.04695120 0.11378961
## 0.05240092 0.10536629
## 0.05227040 0.10817820
## 0.05675965 0.10717504
## 0.05068132 0.11566356
## 0.05442211 0.11186859
## 0.06015667 0.10866209
## 0.05316787 0.11239607
## 0.05714286 0.10692305
## 0.05898206 0.10821058
## 0.05860804 0.10801603
## 0.06330874 0.11383715
## 0.05849422 0.11579327
## 0.06460078 0.10359157

```

```
## 0.05820872 0.10933123
## 0.06149329 0.10047186
## 0.06517589 0.10253584
## 0.06765175 0.11633964
## 0.06505308 0.11254384
## 0.05536596 0.10430317
## 0.06190102 0.10244536
## 0.06345331 0.09987223
## 0.06126257 0.10512863
## 0.06054315 0.10135711
##
## Tuning parameter 'shrinkage' was held constant at a value of 0.1
##
## Tuning parameter 'n.minobsinnode' was held constant at a value of 10
## ROC was used to select the optimal model using the largest value.
## The final values used for the model were n.trees = 100,
## interaction.depth = 1, shrinkage = 0.1 and n.minobsinnode = 10.
```

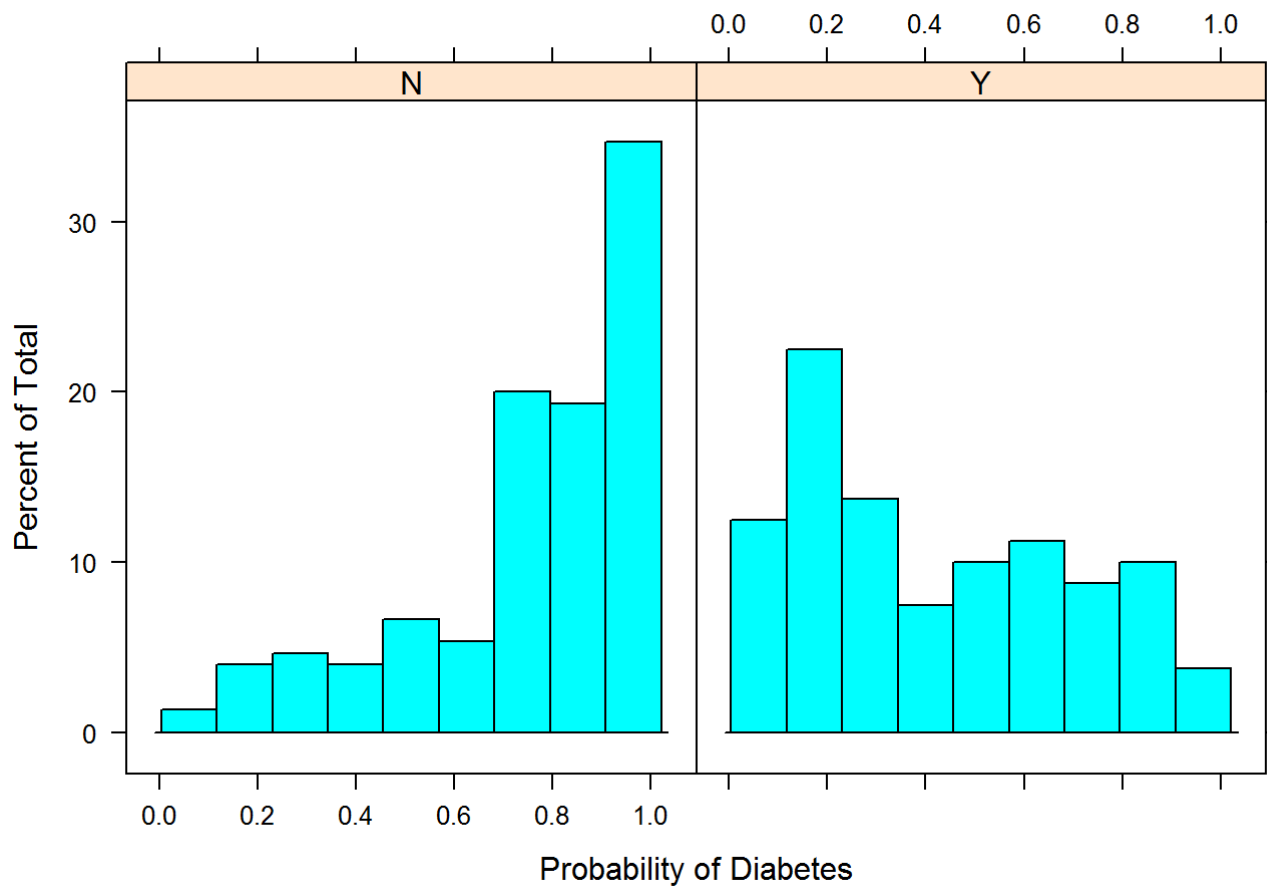
```
plot(gbmFit)
```



```
gbmClass=predict(gbmFit, newdata=testing)
gbmProbs <- predict(gbmFit, newdata = testing, type = "prob")
head(gbmProbs)
```

```
##          N          Y
## 1 0.9035570 0.09644298
## 2 0.2232907 0.77670931
## 3 0.9735764 0.02642360
## 4 0.9049295 0.09507054
## 5 0.4498817 0.55011832
## 6 0.1372012 0.86279880
```

```
histogram(~gbmProbs$N|testing$Class, xlab = "Probability of Diabetes")
```

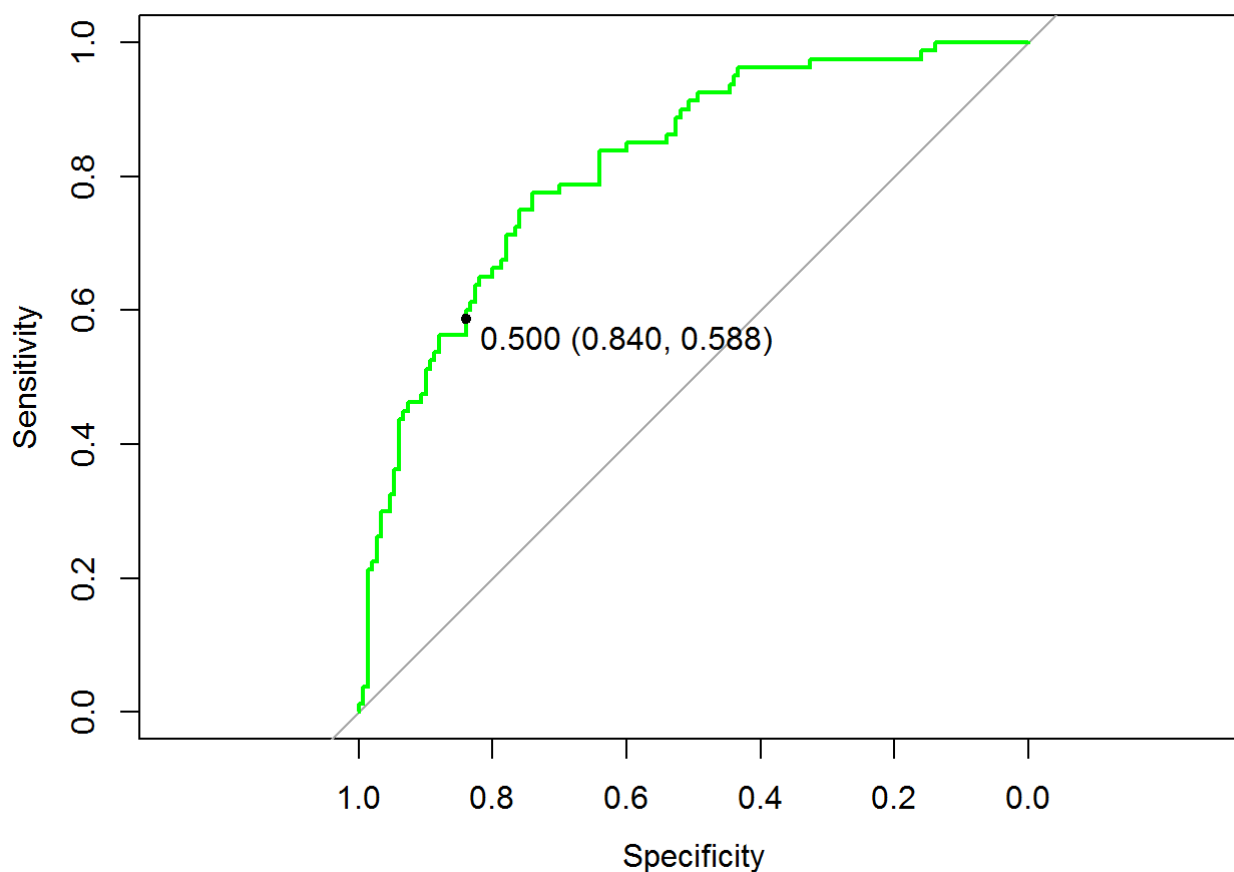


```
g.c = confusionMatrix(data = gbmClass, testing$Class)
g.Accuracy = g.c$overall[1]
g.kappa = g.c$overall[2]

#plot ROC
gbmROC <- roc(testing$Class, gbmProbs[, 1], levels(testing$Class))
gbmROC$auc
```

```
## Area under the curve: 0.8179
```

```
plot(gbmROC, type = "S", print.thres = .5, col='green')
```



```
##
## Call:
## roc.default(response = testing$Class, predictor = gbmProbs[, 1], controls = levels(testin
g$Class))
##
## Data: gbmProbs[, 1] in 150 controls (testing$Class N) > 80 cases (testing$Class Y).
## Area under the curve: 0.8179
```

3. SVM method

```
set.seed(1)

v.start.time = proc.time()
svmFit = train(Class~., data = training, method = "svmRadial", tuneLength = 5, trControl = fitCo
ntrol.2, metric = "ROC", preProc = c("center", "scale"))
```

```
## Loading required package: kernlab
```

```
##
## Attaching package: 'kernlab'
```

```
## The following object is masked from 'package:ggplot2':
##
##   alpha
```

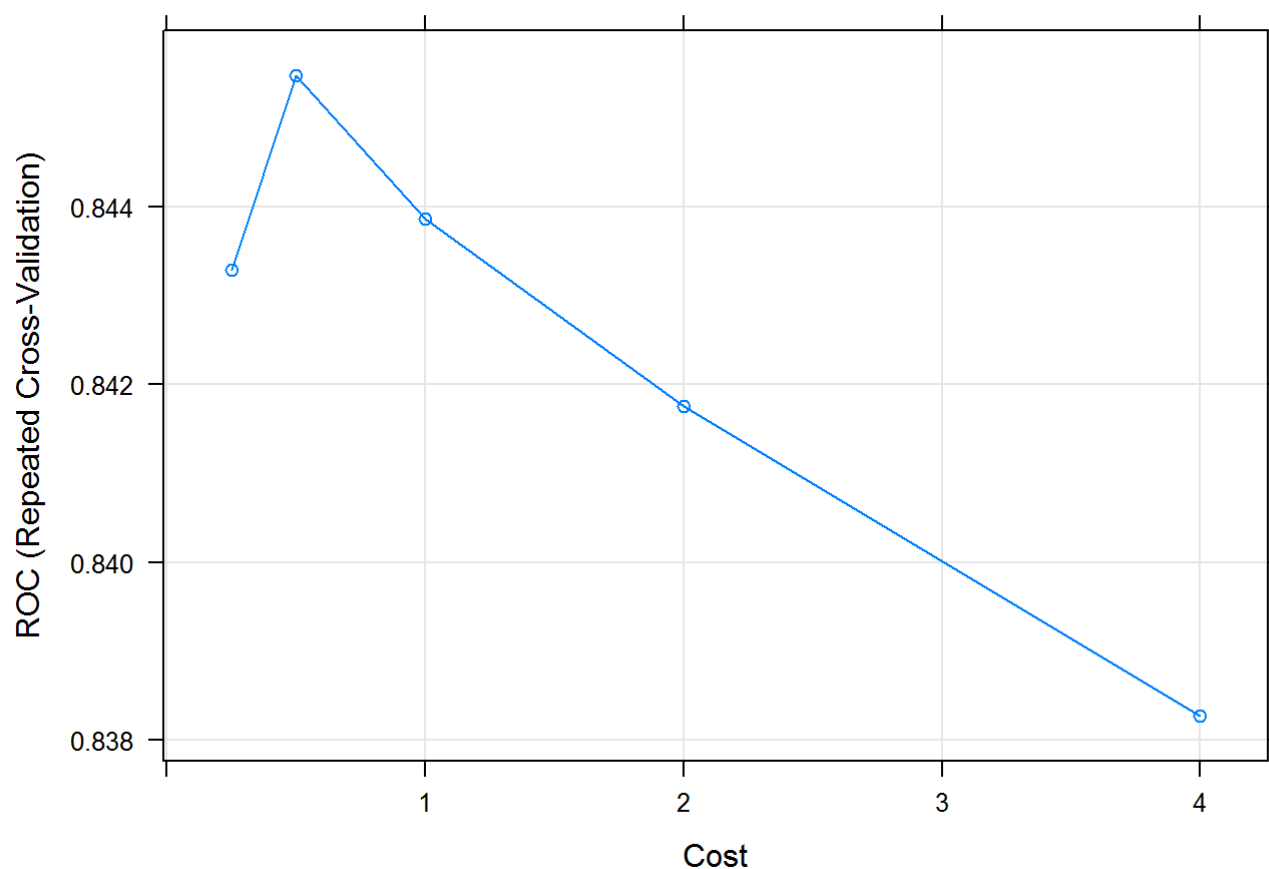
```
v.tatol.time = proc.time() - v.start.time
v.tatol.time[3]
```

```
## elapsed
##   23.25
```

```
svmFit
```

```
## Support Vector Machines with Radial Basis Function Kernel
##
## 538 samples
##   8 predictor
##   2 classes: 'N', 'Y'
##
## Pre-processing: centered (8), scaled (8)
## Resampling: Cross-Validated (10 fold, repeated 5 times)
## Summary of sample sizes: 484, 484, 484, 484, 484, 484, ...
## Resampling results across tuning parameters:
##
##   C      ROC      Sens      Spec      ROC SD      Sens SD
##   0.25  0.8432899  0.8651429  0.6122807  0.04780006  0.05228315
##   0.50  0.8454871  0.8685714  0.5994152  0.04742318  0.05195070
##   1.00  0.8438713  0.8634286  0.5856140  0.04803088  0.05693548
##   2.00  0.8417577  0.8600000  0.5602339  0.04984967  0.05949951
##   4.00  0.8382640  0.8640000  0.5434503  0.05219393  0.04779520
##   Spec SD
##   0.09560746
##   0.09327028
##   0.09151596
##   0.09630208
##   0.10560078
##
## Tuning parameter 'sigma' was held constant at a value of 0.1126622
## ROC was used to select the optimal model using the largest value.
## The final values used for the model were sigma = 0.1126622 and C = 0.5.
```

```
plot(svmFit)
```



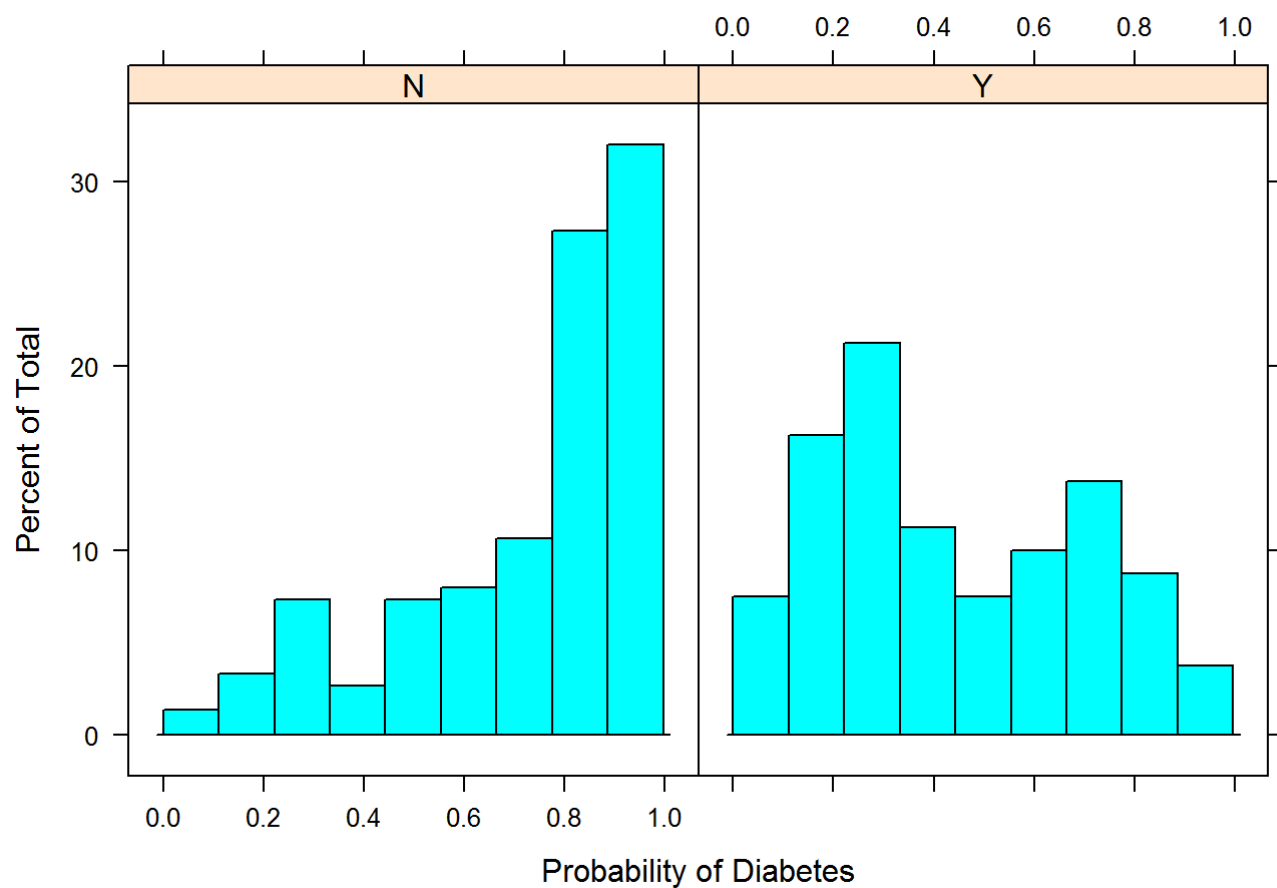
```
svmClass=predict(svmFit, newdata=testing) #predication on test data
svmClass
```

```
## [1] N Y N N Y Y N N Y N N Y N N Y Y Y Y N N Y N N N N N N N Y N Y N Y
## [36] N Y N Y N N N N Y Y N N N N Y Y N N N N N N Y N N N N N Y N N N N Y Y
## [71] Y Y N Y Y Y N N Y Y N N N Y Y N N N N N Y Y N N N N N N Y N N Y N N N
## [106] N N Y Y Y N N N Y Y Y N Y N N Y Y N Y N N N N Y N N N N N Y Y
## [141] N N Y N N N N N N N Y N N Y N N N Y N N N N N Y Y Y N N N N Y N Y
## [176] N N N N N N N N N N Y N N N N N N Y N Y Y N N N Y N Y Y N N Y Y N
## [211] N N N Y Y N N N Y N N N Y Y N Y N N N N
## Levels: N Y
```

```
svmProbs <- predict(svmFit, newdata = testing, type = "prob") #cal probablity
head(svmProbs)
```

```
##           N           Y
## 1 0.9184620 0.08153798
## 2 0.1350432 0.86495681
## 3 0.9424451 0.05755494
## 4 0.8227374 0.17726260
## 5 0.2400533 0.75994669
## 6 0.1573596 0.84264041
```

```
histogram(~svmProbs$N|testing$Class, xlab = "Probability of Diabetes")
```

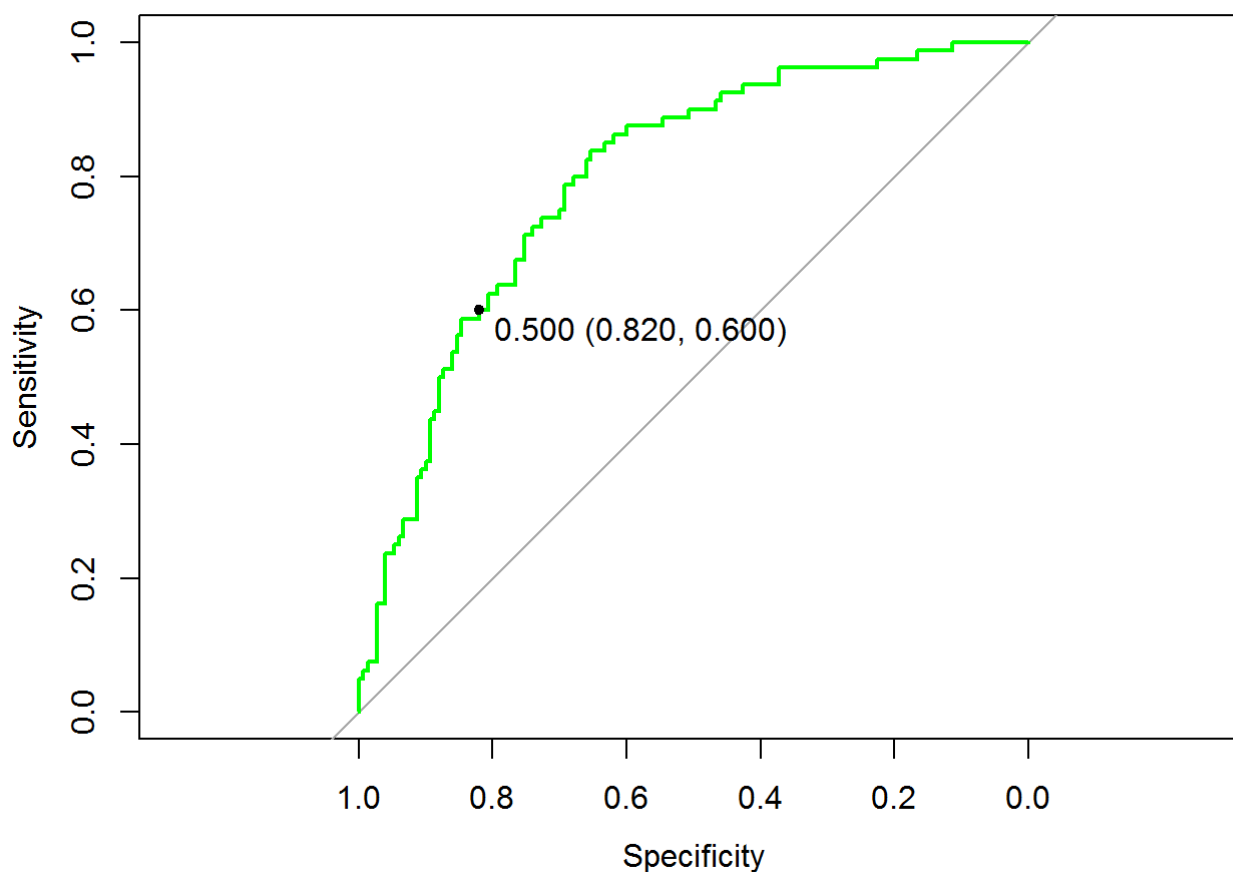


```
#calculate confusionMatix
s.c = confusionMatrix(data = svmClass, testing$Class)
s.Accuracy = s.c$overall[1]
s.kappa = s.c$overall[2]

#plot ROC
svmROC <- roc(testing$Class, svmProbs[, 1], levels(testing$Class))
svmROC$auc
```

```
## Area under the curve: 0.7968
```

```
plot(svmROC, type = "S", print.thres = .5, col='green')
```



```
##
## Call:
## roc.default(response = testing$Class, predictor = svmProbs[, 1], controls = levels(testing$Class))
##
## Data: svmProbs[, 1] in 150 controls (testing$Class N) > 80 cases (testing$Class Y).
## Area under the curve: 0.7968
```

4. Neuralnet

```
set.seed(1)
n.start.time = proc.time()
nnetFit = train(Class~., data = training, method = "nnet", tuneLength = 5, trControl = fitControl(1.2, metric = "ROC", preProc = c("center", "scale")))
```

```
## Loading required package: nnet
```



```
## # weights:  11
## initial  value 395.636267
## iter   10 value 225.003333
## iter   20 value 223.876934
## iter   30 value 220.189202
## iter   40 value 215.766490
## iter   50 value 215.526391
## iter   60 value 215.525446
## final   value 215.525438
## converged
## # weights:  31
## initial  value 321.362610
## iter   10 value 221.932764
## iter   20 value 199.715449
## iter   30 value 195.177379
## iter   40 value 193.223722
## iter   50 value 191.159493
## iter   60 value 189.901149
## iter   70 value 188.543620
## iter   80 value 187.922127
## iter   90 value 187.569377
## iter  100 value 187.541123
## final   value 187.541123
## stopped after 100 iterations
## # weights:  51
## initial  value 301.967005
## iter   10 value 198.720777
## iter   20 value 182.112860
## iter   30 value 169.153066
## iter   40 value 149.916513
## iter   50 value 134.135379
## iter   60 value 127.578092
## iter   70 value 126.520363
## iter   80 value 126.301240
## iter   90 value 126.192195
## iter  100 value 125.998123
## final   value 125.998123
## stopped after 100 iterations
## # weights:  71
## initial  value 349.425157
## iter   10 value 208.992510
## iter   20 value 180.529184
## iter   30 value 166.431048
## iter   40 value 150.800728
## iter   50 value 135.395883
## iter   60 value 128.270113
## iter   70 value 126.443717
## iter   80 value 126.318449
## iter   90 value 126.283273
## iter  100 value 126.266331
## final   value 126.266331
## stopped after 100 iterations
## # weights:  91
```

```
## initial value 306.714995
## iter 10 value 200.771675
## iter 20 value 166.429446
## iter 30 value 139.614584
## iter 40 value 115.182781
## iter 50 value 107.758866
## iter 60 value 96.683538
## iter 70 value 93.030951
## iter 80 value 91.344037
## iter 90 value 89.924449
## iter 100 value 88.452694
## final value 88.452694
## stopped after 100 iterations
## # weights: 11
## initial value 312.606732
## iter 10 value 230.772293
## iter 20 value 220.437206
## iter 30 value 219.424541
## final value 219.406594
## converged
## # weights: 31
## initial value 353.722235
## iter 10 value 227.435168
## iter 20 value 206.245492
## iter 30 value 200.540059
## iter 40 value 199.767127
## iter 50 value 199.248952
## iter 60 value 199.219022
## iter 70 value 199.218030
## iter 80 value 199.217857
## final value 199.217851
## converged
## # weights: 51
## initial value 380.528909
## iter 10 value 208.936309
## iter 20 value 197.737926
## iter 30 value 192.623453
## iter 40 value 191.679797
## iter 50 value 191.461814
## iter 60 value 190.881993
## iter 70 value 189.085970
## iter 80 value 188.736720
## iter 90 value 188.289789
## iter 100 value 187.917605
## final value 187.917605
## stopped after 100 iterations
## # weights: 71
## initial value 310.985849
## iter 10 value 209.079916
## iter 20 value 195.853971
## iter 30 value 189.778350
## iter 40 value 186.422144
## iter 50 value 183.355817
## iter 60 value 181.704050
```

```
## iter 70 value 181.481462
## iter 80 value 181.103747
## iter 90 value 180.947314
## iter 100 value 179.981760
## final value 179.981760
## stopped after 100 iterations
## # weights: 91
## initial value 306.961545
## iter 10 value 208.598062
## iter 20 value 186.007465
## iter 30 value 175.044618
## iter 40 value 168.843702
## iter 50 value 166.761720
## iter 60 value 166.442818
## iter 70 value 164.077435
## iter 80 value 163.256885
## iter 90 value 162.753680
## iter 100 value 162.615246
## final value 162.615246
## stopped after 100 iterations
## # weights: 11
## initial value 442.709067
## iter 10 value 229.327074
## iter 20 value 218.604471
## iter 30 value 216.341434
## iter 40 value 216.173480
## final value 216.173312
## converged
## # weights: 31
## initial value 333.284396
## iter 10 value 219.386000
## iter 20 value 199.190325
## iter 30 value 195.049157
## iter 40 value 194.089529
## iter 50 value 193.720513
## iter 60 value 193.700760
## iter 70 value 193.696547
## final value 193.696509
## converged
## # weights: 51
## initial value 310.225601
## iter 10 value 199.808249
## iter 20 value 182.518392
## iter 30 value 177.104914
## iter 40 value 174.490260
## iter 50 value 172.408984
## iter 60 value 171.898481
## iter 70 value 171.857668
## iter 80 value 171.845550
## iter 90 value 171.845372
## final value 171.845368
## converged
## # weights: 71
## initial value 346.607493
```

```
## iter 10 value 204.474151
## iter 20 value 180.942605
## iter 30 value 169.849570
## iter 40 value 163.901171
## iter 50 value 161.849637
## iter 60 value 160.655363
## iter 70 value 157.684898
## iter 80 value 155.737383
## iter 90 value 154.135876
## iter 100 value 153.838394
## final value 153.838394
## stopped after 100 iterations
## # weights: 91
## initial value 312.633205
## iter 10 value 200.645652
## iter 20 value 164.809124
## iter 30 value 133.219758
## iter 40 value 119.920088
## iter 50 value 116.814607
## iter 60 value 115.734688
## iter 70 value 114.766137
## iter 80 value 114.385805
## iter 90 value 114.129057
## iter 100 value 110.760097
## final value 110.760097
## stopped after 100 iterations
## # weights: 11
## initial value 348.797034
## iter 10 value 219.763009
## iter 20 value 215.860741
## iter 30 value 215.595274
## final value 215.594974
## converged
## # weights: 31
## initial value 323.620529
## iter 10 value 203.647814
## iter 20 value 193.479842
## iter 30 value 190.116657
## iter 40 value 188.305348
## iter 50 value 187.458292
## iter 60 value 187.130898
## iter 70 value 187.100248
## iter 70 value 187.100248
## iter 70 value 187.100248
## final value 187.100248
## converged
## # weights: 51
## initial value 339.257964
## iter 10 value 214.551508
## iter 20 value 192.684827
## iter 30 value 177.710537
## iter 40 value 168.847688
## iter 50 value 162.419450
## iter 60 value 161.136878
```

```
## iter 70 value 160.926824
## iter 80 value 160.686011
## iter 90 value 160.597068
## iter 100 value 160.486461
## final value 160.486461
## stopped after 100 iterations
## # weights: 71
## initial value 347.259030
## iter 10 value 205.633080
## iter 20 value 174.499661
## iter 30 value 149.653733
## iter 40 value 143.340969
## iter 50 value 141.275910
## iter 60 value 139.687315
## iter 70 value 139.350729
## iter 80 value 139.123316
## iter 90 value 139.048552
## iter 100 value 138.985937
## final value 138.985937
## stopped after 100 iterations
## # weights: 91
## initial value 375.014365
## iter 10 value 199.474410
## iter 20 value 162.474511
## iter 30 value 126.636933
## iter 40 value 106.620650
## iter 50 value 98.805968
## iter 60 value 96.014612
## iter 70 value 94.898113
## iter 80 value 94.047530
## iter 90 value 93.686856
## iter 100 value 93.470924
## final value 93.470924
## stopped after 100 iterations
## # weights: 11
## initial value 380.776159
## iter 10 value 230.744878
## iter 20 value 215.592746
## iter 30 value 215.551420
## final value 215.532453
## converged
## # weights: 31
## initial value 314.899498
## iter 10 value 222.133584
## iter 20 value 202.587932
## iter 30 value 197.039852
## iter 40 value 193.792153
## iter 50 value 191.139373
## iter 60 value 189.038144
## iter 70 value 188.683768
## iter 80 value 188.636705
## iter 90 value 188.611291
## iter 100 value 188.469831
## final value 188.469831
```

```
## stopped after 100 iterations
## # weights:  51
## initial  value 309.687688
## iter   10 value 207.757887
## iter   20 value 185.975361
## iter   30 value 171.753194
## iter   40 value 167.520452
## iter   50 value 156.375059
## iter   60 value 155.809306
## iter   70 value 155.748844
## iter   80 value 155.726612
## iter   90 value 155.693286
## iter  100 value 155.627957
## final   value 155.627957
## stopped after 100 iterations
## # weights:  71
## initial  value 405.714483
## iter   10 value 201.769779
## iter   20 value 176.390493
## iter   30 value 155.572281
## iter   40 value 144.217995
## iter   50 value 139.171927
## iter   60 value 132.255103
## iter   70 value 126.258699
## iter   80 value 122.383378
## iter   90 value 121.049260
## iter  100 value 120.567630
## final   value 120.567630
## stopped after 100 iterations
## # weights:  91
## initial  value 338.707118
## iter   10 value 201.866299
## iter   20 value 174.355417
## iter   30 value 150.940609
## iter   40 value 128.655076
## iter   50 value 108.376885
## iter   60 value 98.568005
## iter   70 value 96.780333
## iter   80 value 96.462253
## iter   90 value 96.304473
## iter  100 value 96.208772
## final   value 96.208772
## stopped after 100 iterations
## # weights:  11
## initial  value 343.899418
## iter   10 value 214.958119
## iter   20 value 212.588911
## iter   30 value 212.523540
## final   value 212.518373
## converged
## # weights:  31
## initial  value 443.631097
## iter   10 value 214.348197
## iter   20 value 197.126001
```

```
## iter 30 value 191.952247
## iter 40 value 186.590122
## iter 50 value 183.088733
## iter 60 value 180.605684
## iter 70 value 180.362209
## iter 80 value 180.297311
## iter 90 value 180.233772
## iter 100 value 179.896789
## final value 179.896789
## stopped after 100 iterations
## # weights: 51
## initial value 371.829473
## iter 10 value 221.292201
## iter 20 value 191.774523
## iter 30 value 172.716635
## iter 40 value 162.749213
## iter 50 value 148.858127
## iter 60 value 145.734320
## iter 70 value 145.439207
## iter 80 value 145.437014
## iter 90 value 145.429299
## iter 100 value 145.152600
## final value 145.152600
## stopped after 100 iterations
## # weights: 71
## initial value 464.361827
## iter 10 value 193.003768
## iter 20 value 173.574197
## iter 30 value 161.124273
## iter 40 value 150.649550
## iter 50 value 143.408227
## iter 60 value 136.322231
## iter 70 value 126.514230
## iter 80 value 121.061311
## iter 90 value 120.319744
## iter 100 value 120.273066
## final value 120.273066
## stopped after 100 iterations
## # weights: 91
## initial value 320.135000
## iter 10 value 199.690423
## iter 20 value 167.394916
## iter 30 value 135.130547
## iter 40 value 119.312710
## iter 50 value 109.778452
## iter 60 value 96.327683
## iter 70 value 88.137577
## iter 80 value 87.258208
## iter 90 value 87.206650
## iter 100 value 87.200924
## final value 87.200924
## stopped after 100 iterations
## # weights: 11
## initial value 301.682766
```

```
## iter 10 value 218.193003
## iter 20 value 216.041180
## final value 216.035539
## converged
## # weights: 31
## initial value 332.265476
## iter 10 value 224.090526
## iter 20 value 205.922640
## iter 30 value 199.442880
## iter 40 value 198.036218
## iter 50 value 196.893570
## iter 60 value 195.891295
## iter 70 value 195.798042
## iter 80 value 195.789550
## final value 195.789404
## converged
## # weights: 51
## initial value 319.764236
## iter 10 value 209.863920
## iter 20 value 194.606429
## iter 30 value 191.538421
## iter 40 value 187.646597
## iter 50 value 186.064939
## iter 60 value 185.350830
## iter 70 value 185.065498
## iter 80 value 184.982294
## iter 90 value 184.797590
## final value 184.795707
## converged
## # weights: 71
## initial value 318.063589
## iter 10 value 202.280804
## iter 20 value 186.374373
## iter 30 value 176.441789
## iter 40 value 172.846176
## iter 50 value 171.762025
## iter 60 value 171.278826
## iter 70 value 171.152386
## iter 80 value 171.112842
## iter 90 value 171.110023
## final value 171.109997
## converged
## # weights: 91
## initial value 283.022194
## iter 10 value 204.120615
## iter 20 value 184.866440
## iter 30 value 176.179155
## iter 40 value 169.473069
## iter 50 value 165.029496
## iter 60 value 163.956363
## iter 70 value 163.410368
## iter 80 value 162.589183
## iter 90 value 161.933126
## iter 100 value 161.852250
```



```
## final value 161.852250
## stopped after 100 iterations
## # weights: 11
## initial value 320.877391
## iter 10 value 224.171230
## iter 20 value 216.377204
## iter 30 value 213.261442
## iter 40 value 212.929485
## iter 40 value 212.929483
## iter 40 value 212.929483
## final value 212.929483
## converged
## # weights: 31
## initial value 353.606706
## iter 10 value 210.324884
## iter 20 value 197.081218
## iter 30 value 192.719852
## iter 40 value 188.946170
## iter 50 value 187.473252
## iter 60 value 186.978610
## iter 70 value 186.910598
## iter 80 value 186.878860
## iter 90 value 186.877912
## final value 186.877731
## converged
## # weights: 51
## initial value 378.550947
## iter 10 value 207.205443
## iter 20 value 191.687136
## iter 30 value 175.601873
## iter 40 value 169.099573
## iter 50 value 167.996146
## iter 60 value 166.929662
## iter 70 value 166.254984
## iter 80 value 164.616133
## iter 90 value 164.483737
## iter 100 value 164.418594
## final value 164.418594
## stopped after 100 iterations
## # weights: 71
## initial value 332.747002
## iter 10 value 202.525313
## iter 20 value 180.032066
## iter 30 value 161.683642
## iter 40 value 153.468778
## iter 50 value 152.134969
## iter 60 value 151.565500
## iter 70 value 149.329286
## iter 80 value 141.518200
## iter 90 value 139.320641
## iter 100 value 137.484362
## final value 137.484362
## stopped after 100 iterations
## # weights: 91
```

```
## initial value 330.285012
## iter 10 value 202.448740
## iter 20 value 171.979046
## iter 30 value 148.027356
## iter 40 value 139.310299
## iter 50 value 132.038705
## iter 60 value 125.050490
## iter 70 value 121.668485
## iter 80 value 120.411677
## iter 90 value 119.862779
## iter 100 value 119.393914
## final value 119.393914
## stopped after 100 iterations
## # weights: 11
## initial value 362.803340
## iter 10 value 224.906380
## iter 20 value 222.089553
## iter 30 value 218.848681
## iter 40 value 217.047280
## iter 50 value 212.659748
## iter 60 value 212.560729
## final value 212.560722
## converged
## # weights: 31
## initial value 369.114635
## iter 10 value 214.879092
## iter 20 value 185.622188
## iter 30 value 181.869211
## iter 40 value 178.080098
## iter 50 value 176.630748
## iter 60 value 175.612233
## iter 70 value 174.810766
## iter 80 value 174.735217
## iter 90 value 174.635937
## iter 100 value 174.631223
## final value 174.631223
## stopped after 100 iterations
## # weights: 51
## initial value 301.130808
## iter 10 value 198.103927
## iter 20 value 183.681473
## iter 30 value 174.662076
## iter 40 value 164.361140
## iter 50 value 160.152008
## iter 60 value 159.407414
## iter 70 value 158.583035
## iter 80 value 157.648194
## iter 90 value 157.383492
## iter 100 value 157.284190
## final value 157.284190
## stopped after 100 iterations
## # weights: 71
## initial value 455.115076
## iter 10 value 210.732209
```

```
## iter 20 value 174.506033
## iter 30 value 149.762940
## iter 40 value 134.052667
## iter 50 value 128.338075
## iter 60 value 123.082488
## iter 70 value 121.358547
## iter 80 value 120.893800
## iter 90 value 120.041142
## iter 100 value 119.435362
## final value 119.435362
## stopped after 100 iterations
## # weights: 91
## initial value 542.902346
## iter 10 value 199.390579
## iter 20 value 159.744464
## iter 30 value 116.307095
## iter 40 value 98.598161
## iter 50 value 92.162311
## iter 60 value 89.358275
## iter 70 value 88.020487
## iter 80 value 86.673683
## iter 90 value 85.807677
## iter 100 value 84.756660
## final value 84.756660
## stopped after 100 iterations
## # weights: 11
## initial value 313.475660
## iter 10 value 228.185654
## iter 20 value 224.336379
## iter 30 value 223.295314
## iter 40 value 222.695733
## iter 50 value 222.693999
## final value 222.690871
## converged
## # weights: 31
## initial value 306.744986
## iter 10 value 212.695355
## iter 20 value 198.623756
## iter 30 value 192.473616
## iter 40 value 184.315995
## iter 50 value 183.761336
## iter 60 value 182.470485
## iter 70 value 180.887284
## iter 80 value 179.128782
## iter 90 value 177.887417
## iter 100 value 174.400495
## final value 174.400495
## stopped after 100 iterations
## # weights: 51
## initial value 461.564109
## iter 10 value 206.058234
## iter 20 value 184.635339
## iter 30 value 171.809493
## iter 40 value 154.074625
```

```
## iter 50 value 148.223774
## iter 60 value 146.979819
## iter 70 value 146.760611
## iter 80 value 146.643312
## iter 90 value 146.526165
## iter 100 value 146.197619
## final value 146.197619
## stopped after 100 iterations
## # weights: 71
## initial value 408.639457
## iter 10 value 213.732630
## iter 20 value 189.144836
## iter 30 value 159.931947
## iter 40 value 141.475000
## iter 50 value 128.696597
## iter 60 value 116.360920
## iter 70 value 113.420732
## iter 80 value 113.109524
## iter 90 value 112.965290
## iter 100 value 112.812940
## final value 112.812940
## stopped after 100 iterations
## # weights: 91
## initial value 687.564776
## iter 10 value 196.207504
## iter 20 value 159.265497
## iter 30 value 140.229288
## iter 40 value 126.702743
## iter 50 value 120.497596
## iter 60 value 111.424586
## iter 70 value 106.101918
## iter 80 value 104.712626
## iter 90 value 102.444598
## iter 100 value 99.655683
## final value 99.655683
## stopped after 100 iterations
## # weights: 11
## initial value 333.235671
## iter 10 value 236.091979
## iter 20 value 230.124306
## iter 30 value 222.463205
## iter 40 value 219.949410
## final value 219.937496
## converged
## # weights: 31
## initial value 343.205484
## iter 10 value 215.320924
## iter 20 value 205.812166
## iter 30 value 199.229152
## iter 40 value 190.602186
## iter 50 value 188.964264
## iter 60 value 187.520511
## iter 70 value 182.466193
## iter 80 value 181.050394
```

```
## iter 90 value 180.918664
## iter 100 value 180.873816
## final value 180.873816
## stopped after 100 iterations
## # weights: 51
## initial value 306.597810
## iter 10 value 214.011950
## iter 20 value 191.615166
## iter 30 value 172.487886
## iter 40 value 167.507583
## iter 50 value 165.486596
## iter 60 value 163.343320
## iter 70 value 159.472300
## iter 80 value 149.474203
## iter 90 value 143.241868
## iter 100 value 142.336722
## final value 142.336722
## stopped after 100 iterations
## # weights: 71
## initial value 416.448385
## iter 10 value 209.724992
## iter 20 value 183.398534
## iter 30 value 157.441803
## iter 40 value 145.963985
## iter 50 value 140.314912
## iter 60 value 132.803921
## iter 70 value 124.666207
## iter 80 value 116.637199
## iter 90 value 114.229534
## iter 100 value 113.587150
## final value 113.587150
## stopped after 100 iterations
## # weights: 91
## initial value 346.779686
## iter 10 value 205.066217
## iter 20 value 158.683575
## iter 30 value 129.911999
## iter 40 value 120.729534
## iter 50 value 111.381091
## iter 60 value 99.798034
## iter 70 value 98.212595
## iter 80 value 97.898697
## iter 90 value 97.877353
## final value 97.877143
## converged
## # weights: 11
## initial value 315.937420
## iter 10 value 224.645414
## iter 20 value 224.021844
## final value 224.014304
## converged
## # weights: 31
## initial value 330.797698
## iter 10 value 224.946411
```

```
## iter 20 value 210.156422
## iter 30 value 207.194347
## iter 40 value 205.516343
## iter 50 value 204.402147
## iter 60 value 204.387125
## final value 204.386640
## converged
## # weights: 51
## initial value 352.566783
## iter 10 value 222.970242
## iter 20 value 204.555556
## iter 30 value 199.614781
## iter 40 value 194.753242
## iter 50 value 192.313934
## iter 60 value 191.894481
## iter 70 value 191.709064
## iter 80 value 190.671211
## iter 90 value 190.643527
## final value 190.643517
## converged
## # weights: 71
## initial value 346.949648
## iter 10 value 231.107805
## iter 20 value 206.628402
## iter 30 value 194.123888
## iter 40 value 188.671952
## iter 50 value 185.669510
## iter 60 value 184.482801
## iter 70 value 184.062242
## iter 80 value 181.826514
## iter 90 value 180.290399
## iter 100 value 179.672022
## final value 179.672022
## stopped after 100 iterations
## # weights: 91
## initial value 340.479728
## iter 10 value 210.993804
## iter 20 value 195.545511
## iter 30 value 186.115535
## iter 40 value 179.936984
## iter 50 value 177.145126
## iter 60 value 176.418403
## iter 70 value 176.141847
## iter 80 value 175.385760
## iter 90 value 174.957359
## iter 100 value 174.931295
## final value 174.931295
## stopped after 100 iterations
## # weights: 11
## initial value 365.365778
## iter 10 value 234.926754
## iter 20 value 228.087294
## iter 30 value 221.865392
## iter 40 value 220.336848
```

```
## final value 220.326738
## converged
## # weights: 31
## initial value 382.022603
## iter 10 value 215.034837
## iter 20 value 197.304153
## iter 30 value 195.557834
## iter 40 value 195.219681
## iter 50 value 195.198044
## final value 195.196826
## converged
## # weights: 51
## initial value 338.146387
## iter 10 value 211.640329
## iter 20 value 190.572530
## iter 30 value 179.636484
## iter 40 value 176.802750
## iter 50 value 175.724261
## iter 60 value 175.357789
## iter 70 value 175.333418
## iter 80 value 175.333054
## final value 175.333038
## converged
## # weights: 71
## initial value 329.167159
## iter 10 value 212.382300
## iter 20 value 177.152546
## iter 30 value 161.849635
## iter 40 value 158.615674
## iter 50 value 155.904765
## iter 60 value 153.144977
## iter 70 value 151.636051
## iter 80 value 150.935021
## iter 90 value 150.721581
## iter 100 value 150.577462
## final value 150.577462
## stopped after 100 iterations
## # weights: 91
## initial value 310.382699
## iter 10 value 209.617376
## iter 20 value 173.919566
## iter 30 value 157.700886
## iter 40 value 142.239769
## iter 50 value 136.429357
## iter 60 value 131.635146
## iter 70 value 127.652444
## iter 80 value 125.757776
## iter 90 value 122.490782
## iter 100 value 121.032262
## final value 121.032262
## stopped after 100 iterations
## # weights: 11
## initial value 308.303944
## iter 10 value 238.438517
```

```
## iter 20 value 234.209690
## iter 30 value 229.329637
## iter 40 value 221.683139
## iter 50 value 220.164361
## iter 60 value 219.977850
## final value 219.977477
## converged
## # weights: 31
## initial value 467.245589
## iter 10 value 221.245838
## iter 20 value 194.732164
## iter 30 value 188.077042
## iter 40 value 186.145039
## iter 50 value 185.661731
## iter 60 value 185.045995
## iter 70 value 184.968979
## iter 80 value 184.959085
## iter 90 value 184.929493
## iter 100 value 184.927587
## final value 184.927587
## stopped after 100 iterations
## # weights: 51
## initial value 367.833035
## iter 10 value 212.361088
## iter 20 value 191.668063
## iter 30 value 176.319815
## iter 40 value 172.298067
## iter 50 value 170.877353
## iter 60 value 169.556580
## iter 70 value 169.450145
## iter 80 value 169.165086
## iter 90 value 169.040344
## iter 100 value 168.997703
## final value 168.997703
## stopped after 100 iterations
## # weights: 71
## initial value 378.034452
## iter 10 value 208.707788
## iter 20 value 182.759739
## iter 30 value 164.844997
## iter 40 value 154.245323
## iter 50 value 145.892846
## iter 60 value 141.980746
## iter 70 value 140.062504
## iter 80 value 138.366924
## iter 90 value 137.252986
## iter 100 value 136.782998
## final value 136.782998
## stopped after 100 iterations
## # weights: 91
## initial value 335.763458
## iter 10 value 208.251015
## iter 20 value 170.916498
## iter 30 value 145.201831
```



```
## iter 40 value 132.317677
## iter 50 value 122.940292
## iter 60 value 121.117360
## iter 70 value 120.343084
## iter 80 value 119.843958
## iter 90 value 119.659628
## iter 100 value 119.516716
## final value 119.516716
## stopped after 100 iterations
## # weights: 11
## initial value 365.645500
## iter 10 value 228.625522
## iter 20 value 220.716961
## iter 30 value 219.967967
## iter 40 value 219.942626
## iter 40 value 219.942626
## iter 40 value 219.942626
## final value 219.942626
## converged
## # weights: 31
## initial value 358.377481
## iter 10 value 213.347284
## iter 20 value 207.204387
## iter 30 value 200.790754
## iter 40 value 196.710415
## iter 50 value 194.722498
## iter 60 value 193.272933
## iter 70 value 192.785704
## iter 80 value 191.984583
## iter 90 value 190.969492
## iter 100 value 188.046817
## final value 188.046817
## stopped after 100 iterations
## # weights: 51
## initial value 313.750001
## iter 10 value 217.506268
## iter 20 value 194.267045
## iter 30 value 174.612971
## iter 40 value 163.176566
## iter 50 value 157.041617
## iter 60 value 152.463531
## iter 70 value 148.936227
## iter 80 value 148.607227
## iter 90 value 148.325274
## iter 100 value 148.283870
## final value 148.283870
## stopped after 100 iterations
## # weights: 71
## initial value 335.749807
## iter 10 value 216.013336
## iter 20 value 174.700116
## iter 30 value 147.531627
## iter 40 value 138.362409
## iter 50 value 130.234436
```

```
## iter 60 value 124.916537
## iter 70 value 123.271431
## iter 80 value 122.730067
## iter 90 value 122.616048
## iter 100 value 122.405081
## final value 122.405081
## stopped after 100 iterations
## # weights: 91
## initial value 330.874451
## iter 10 value 206.233427
## iter 20 value 167.958113
## iter 30 value 136.338347
## iter 40 value 117.882534
## iter 50 value 106.615293
## iter 60 value 102.389294
## iter 70 value 100.774598
## iter 80 value 100.533744
## iter 90 value 100.472278
## iter 100 value 100.388423
## final value 100.388423
## stopped after 100 iterations
## # weights: 11
## initial value 308.362502
## iter 10 value 241.040131
## iter 20 value 230.593655
## iter 30 value 229.276335
## iter 40 value 228.244809
## iter 50 value 222.567459
## iter 60 value 220.819760
## final value 220.728898
## converged
## # weights: 31
## initial value 307.546261
## iter 10 value 220.843297
## iter 20 value 204.088305
## iter 30 value 197.626529
## iter 40 value 190.263530
## iter 50 value 187.393164
## iter 60 value 181.580692
## iter 70 value 180.970922
## iter 80 value 180.896932
## iter 90 value 180.893311
## iter 100 value 180.892467
## final value 180.892467
## stopped after 100 iterations
## # weights: 51
## initial value 373.104183
## iter 10 value 218.120784
## iter 20 value 195.054805
## iter 30 value 188.388281
## iter 40 value 183.391747
## iter 50 value 179.968695
## iter 60 value 171.155575
## iter 70 value 164.929495
```

```
## iter 80 value 155.321502
## iter 90 value 151.685045
## iter 100 value 151.512192
## final value 151.512192
## stopped after 100 iterations
## # weights: 71
## initial value 393.440394
## iter 10 value 218.904467
## iter 20 value 191.142388
## iter 30 value 174.496553
## iter 40 value 160.588732
## iter 50 value 152.523227
## iter 60 value 144.954910
## iter 70 value 140.771478
## iter 80 value 131.391579
## iter 90 value 127.673313
## iter 100 value 126.521017
## final value 126.521017
## stopped after 100 iterations
## # weights: 91
## initial value 437.910121
## iter 10 value 210.351319
## iter 20 value 179.863762
## iter 30 value 148.508199
## iter 40 value 131.748354
## iter 50 value 124.161445
## iter 60 value 111.984634
## iter 70 value 101.373263
## iter 80 value 99.215042
## iter 90 value 98.704299
## iter 100 value 98.644757
## final value 98.644757
## stopped after 100 iterations
## # weights: 11
## initial value 344.657530
## iter 10 value 228.174324
## iter 20 value 224.044130
## iter 30 value 224.024124
## final value 224.023534
## converged
## # weights: 31
## initial value 374.154307
## iter 10 value 223.460666
## iter 20 value 211.453951
## iter 30 value 206.849102
## iter 40 value 205.525007
## iter 50 value 205.323299
## final value 205.322863
## converged
## # weights: 51
## initial value 313.718325
## iter 10 value 217.038795
## iter 20 value 207.149121
## iter 30 value 200.604733
```

```
## iter 40 value 197.026022
## iter 50 value 196.223544
## iter 60 value 196.157046
## iter 70 value 196.145968
## final value 196.145699
## converged
## # weights: 71
## initial value 366.522681
## iter 10 value 228.963010
## iter 20 value 200.128787
## iter 30 value 191.635260
## iter 40 value 186.627891
## iter 50 value 184.256158
## iter 60 value 183.077526
## iter 70 value 182.787989
## iter 80 value 182.591948
## iter 90 value 182.500694
## iter 100 value 182.498094
## final value 182.498094
## stopped after 100 iterations
## # weights: 91
## initial value 333.734659
## iter 10 value 225.899672
## iter 20 value 200.190303
## iter 30 value 186.421207
## iter 40 value 179.862142
## iter 50 value 177.762592
## iter 60 value 176.670243
## iter 70 value 175.842620
## iter 80 value 175.675511
## iter 90 value 175.417017
## iter 100 value 175.344268
## final value 175.344268
## stopped after 100 iterations
## # weights: 11
## initial value 365.912014
## iter 10 value 235.219296
## iter 20 value 231.171655
## iter 30 value 223.267182
## iter 40 value 221.172183
## iter 50 value 221.116473
## final value 221.115782
## converged
## # weights: 31
## initial value 334.678380
## iter 10 value 223.171096
## iter 20 value 212.200298
## iter 30 value 206.066371
## iter 40 value 201.084622
## iter 50 value 198.827627
## iter 60 value 198.341221
## iter 70 value 198.310735
## iter 80 value 198.305857
## iter 90 value 198.303374
```

```
## final value 198.303124
## converged
## # weights: 51
## initial value 358.939885
## iter 10 value 216.761397
## iter 20 value 199.441534
## iter 30 value 191.549799
## iter 40 value 189.858269
## iter 50 value 189.273981
## iter 60 value 189.222770
## iter 70 value 189.214607
## final value 189.214397
## converged
## # weights: 71
## initial value 414.298877
## iter 10 value 213.763570
## iter 20 value 186.704786
## iter 30 value 175.189954
## iter 40 value 166.653043
## iter 50 value 161.146983
## iter 60 value 152.631843
## iter 70 value 149.158460
## iter 80 value 148.198055
## iter 90 value 147.271366
## iter 100 value 147.057088
## final value 147.057088
## stopped after 100 iterations
## # weights: 91
## initial value 471.887553
## iter 10 value 213.675165
## iter 20 value 184.509385
## iter 30 value 163.881758
## iter 40 value 157.107965
## iter 50 value 154.766153
## iter 60 value 147.851084
## iter 70 value 145.274474
## iter 80 value 141.430347
## iter 90 value 138.524639
## iter 100 value 138.027566
## final value 138.027566
## stopped after 100 iterations
## # weights: 11
## initial value 335.610990
## iter 10 value 236.143340
## iter 20 value 227.267844
## iter 30 value 221.276407
## iter 40 value 220.769049
## final value 220.768789
## converged
## # weights: 31
## initial value 328.161619
## iter 10 value 220.998730
## iter 20 value 210.039334
## iter 30 value 203.670909
```

```
## iter 40 value 190.163113
## iter 50 value 186.740323
## iter 60 value 186.193768
## iter 70 value 186.013457
## iter 80 value 185.981047
## iter 90 value 185.953214
## final value 185.935551
## converged
## # weights: 51
## initial value 336.322434
## iter 10 value 216.264172
## iter 20 value 200.215962
## iter 30 value 195.184945
## iter 40 value 191.402647
## iter 50 value 185.350459
## iter 60 value 175.602820
## iter 70 value 172.725823
## iter 80 value 172.346742
## iter 90 value 171.891845
## iter 100 value 171.834581
## final value 171.834581
## stopped after 100 iterations
## # weights: 71
## initial value 349.974759
## iter 10 value 220.738546
## iter 20 value 201.743652
## iter 30 value 185.696603
## iter 40 value 168.967666
## iter 50 value 161.740018
## iter 60 value 158.569519
## iter 70 value 156.569797
## iter 80 value 155.022508
## iter 90 value 154.341454
## iter 100 value 153.664706
## final value 153.664706
## stopped after 100 iterations
## # weights: 91
## initial value 601.894529
## iter 10 value 221.420774
## iter 20 value 176.126406
## iter 30 value 150.482981
## iter 40 value 130.813764
## iter 50 value 125.236775
## iter 60 value 120.923782
## iter 70 value 117.371770
## iter 80 value 115.147875
## iter 90 value 112.997290
## iter 100 value 112.395203
## final value 112.395203
## stopped after 100 iterations
## # weights: 11
## initial value 384.919692
## iter 10 value 230.485691
## iter 20 value 221.847934
```

```
## iter 30 value 220.896772
## iter 40 value 220.732902
## iter 40 value 220.732901
## iter 40 value 220.732901
## final value 220.732901
## converged
## # weights: 31
## initial value 381.757200
## iter 10 value 223.385595
## iter 20 value 212.972910
## iter 30 value 205.280051
## iter 40 value 198.942091
## iter 50 value 194.490777
## iter 60 value 193.303398
## iter 70 value 192.995818
## iter 80 value 192.896206
## iter 90 value 192.843315
## iter 100 value 192.838181
## final value 192.838181
## stopped after 100 iterations
## # weights: 51
## initial value 328.215207
## iter 10 value 217.635392
## iter 20 value 198.801639
## iter 30 value 189.063586
## iter 40 value 176.135273
## iter 50 value 172.027084
## iter 60 value 166.949591
## iter 70 value 162.517777
## iter 80 value 160.382726
## iter 90 value 157.488258
## iter 100 value 157.138181
## final value 157.138181
## stopped after 100 iterations
## # weights: 71
## initial value 308.110503
## iter 10 value 211.644978
## iter 20 value 189.166364
## iter 30 value 172.272729
## iter 40 value 159.077497
## iter 50 value 150.451410
## iter 60 value 139.718705
## iter 70 value 134.388031
## iter 80 value 133.846074
## iter 90 value 133.683570
## iter 100 value 132.930443
## final value 132.930443
## stopped after 100 iterations
## # weights: 91
## initial value 317.633998
## iter 10 value 210.206287
## iter 20 value 171.766320
## iter 30 value 146.725700
## iter 40 value 134.554438
```

```
## iter 50 value 124.907104
## iter 60 value 122.958839
## iter 70 value 122.534757
## iter 80 value 122.261644
## iter 90 value 122.099083
## iter 100 value 121.876239
## final value 121.876239
## stopped after 100 iterations
## # weights: 11
## initial value 441.212755
## iter 10 value 229.509326
## iter 20 value 226.146098
## iter 30 value 225.646613
## iter 40 value 219.753687
## iter 50 value 219.692269
## iter 60 value 219.689677
## iter 70 value 219.689132
## iter 80 value 219.688848
## final value 219.688767
## converged
## # weights: 31
## initial value 341.798802
## iter 10 value 216.905285
## iter 20 value 201.772896
## iter 30 value 193.798376
## iter 40 value 190.370156
## iter 50 value 186.474517
## iter 60 value 184.608064
## iter 70 value 183.722048
## iter 80 value 182.688432
## iter 90 value 182.106957
## iter 100 value 181.275473
## final value 181.275473
## stopped after 100 iterations
## # weights: 51
## initial value 334.878373
## iter 10 value 206.409808
## iter 20 value 184.190731
## iter 30 value 174.066983
## iter 40 value 164.127015
## iter 50 value 153.457239
## iter 60 value 146.272459
## iter 70 value 146.196911
## final value 146.196799
## converged
## # weights: 71
## initial value 330.105242
## iter 10 value 204.114191
## iter 20 value 166.995356
## iter 30 value 143.349975
## iter 40 value 137.992110
## iter 50 value 133.666100
## iter 60 value 131.463581
## iter 70 value 128.992819
```



```
## iter 80 value 117.080812
## iter 90 value 115.059334
## iter 100 value 114.590000
## final value 114.590000
## stopped after 100 iterations
## # weights: 91
## initial value 580.330744
## iter 10 value 241.301423
## iter 20 value 189.697294
## iter 30 value 167.124979
## iter 40 value 158.689618
## iter 50 value 148.640317
## iter 60 value 140.205596
## iter 70 value 132.825123
## iter 80 value 128.834364
## iter 90 value 127.044655
## iter 100 value 125.665937
## final value 125.665937
## stopped after 100 iterations
## # weights: 11
## initial value 331.203189
## iter 10 value 237.181324
## iter 20 value 228.380299
## iter 30 value 220.267042
## iter 40 value 219.773431
## iter 40 value 219.773431
## iter 40 value 219.773431
## final value 219.773431
## converged
## # weights: 31
## initial value 312.766703
## iter 10 value 223.898738
## iter 20 value 209.258217
## iter 30 value 205.608781
## iter 40 value 204.778210
## iter 50 value 203.620140
## iter 60 value 203.113718
## iter 70 value 203.092543
## iter 80 value 203.092224
## iter 80 value 203.092223
## iter 80 value 203.092223
## final value 203.092223
## converged
## # weights: 51
## initial value 320.268708
## iter 10 value 217.538414
## iter 20 value 203.093584
## iter 30 value 199.017168
## iter 40 value 196.133326
## iter 50 value 195.105122
## iter 60 value 195.012567
## iter 70 value 195.007966
## final value 195.007825
## converged
```

```
## # weights: 71
## initial value 340.634948
## iter 10 value 211.027239
## iter 20 value 196.034495
## iter 30 value 187.404516
## iter 40 value 184.740426
## iter 50 value 183.803042
## iter 60 value 182.469905
## iter 70 value 181.548907
## iter 80 value 181.050012
## iter 90 value 181.042628
## iter 100 value 181.041273
## final value 181.041273
## stopped after 100 iterations
## # weights: 91
## initial value 295.589292
## iter 10 value 207.686865
## iter 20 value 195.559186
## iter 30 value 183.435384
## iter 40 value 178.107902
## iter 50 value 175.081138
## iter 60 value 173.177045
## iter 70 value 172.404727
## iter 80 value 172.160898
## iter 90 value 170.845103
## iter 100 value 169.730294
## final value 169.730294
## stopped after 100 iterations
## # weights: 11
## initial value 325.259963
## iter 10 value 220.428977
## iter 20 value 216.445373
## iter 30 value 216.361656
## final value 216.358693
## converged
## # weights: 31
## initial value 353.524393
## iter 10 value 210.374544
## iter 20 value 201.894904
## iter 30 value 199.026337
## iter 40 value 196.989192
## iter 50 value 196.918456
## iter 60 value 196.842544
## iter 70 value 196.541469
## iter 80 value 196.332828
## iter 90 value 196.179703
## iter 100 value 196.177355
## final value 196.177355
## stopped after 100 iterations
## # weights: 51
## initial value 315.006023
## iter 10 value 218.455975
## iter 20 value 196.688534
## iter 30 value 186.543410
```

```
## iter 40 value 183.354696
## iter 50 value 182.707516
## iter 60 value 182.642502
## iter 70 value 182.553227
## iter 80 value 182.443331
## iter 90 value 182.391246
## iter 100 value 182.366055
## final value 182.366055
## stopped after 100 iterations
## # weights: 71
## initial value 373.816444
## iter 10 value 209.145746
## iter 20 value 192.344010
## iter 30 value 168.694983
## iter 40 value 158.662311
## iter 50 value 156.401765
## iter 60 value 155.895956
## iter 70 value 155.642839
## iter 80 value 155.137761
## iter 90 value 154.940034
## iter 100 value 154.922381
## final value 154.922381
## stopped after 100 iterations
## # weights: 91
## initial value 351.152572
## iter 10 value 204.245885
## iter 20 value 173.646511
## iter 30 value 158.313775
## iter 40 value 153.591109
## iter 50 value 147.052666
## iter 60 value 139.493392
## iter 70 value 137.219484
## iter 80 value 135.638641
## iter 90 value 134.576649
## iter 100 value 133.186488
## final value 133.186488
## stopped after 100 iterations
## # weights: 11
## initial value 324.741540
## iter 10 value 253.856443
## iter 20 value 244.459931
## iter 30 value 242.320370
## iter 40 value 230.270888
## iter 50 value 225.185744
## iter 60 value 219.549774
## iter 70 value 216.054335
## iter 80 value 215.789616
## iter 90 value 215.511451
## final value 215.509942
## converged
## # weights: 31
## initial value 386.107872
## iter 10 value 223.200648
## iter 20 value 213.080154
```

```
## iter 30 value 204.572104
## iter 40 value 199.906276
## iter 50 value 194.757171
## iter 60 value 191.449662
## iter 70 value 190.441356
## iter 80 value 190.255081
## iter 90 value 189.915171
## iter 100 value 189.809896
## final value 189.809896
## stopped after 100 iterations
## # weights: 51
## initial value 330.744233
## iter 10 value 207.276268
## iter 20 value 190.020453
## iter 30 value 177.458316
## iter 40 value 168.755188
## iter 50 value 163.419447
## iter 60 value 162.367506
## iter 70 value 161.502288
## iter 80 value 161.245673
## iter 90 value 161.223547
## iter 100 value 161.204787
## final value 161.204787
## stopped after 100 iterations
## # weights: 71
## initial value 352.841442
## iter 10 value 207.785865
## iter 20 value 182.868543
## iter 30 value 151.045132
## iter 40 value 140.757368
## iter 50 value 138.137951
## iter 60 value 132.452886
## iter 70 value 128.708977
## iter 80 value 126.899747
## iter 90 value 124.442077
## iter 100 value 123.891260
## final value 123.891260
## stopped after 100 iterations
## # weights: 91
## initial value 501.673062
## iter 10 value 210.681296
## iter 20 value 185.878311
## iter 30 value 157.069981
## iter 40 value 141.039453
## iter 50 value 132.415837
## iter 60 value 128.346846
## iter 70 value 126.619558
## iter 80 value 124.994394
## iter 90 value 122.508020
## iter 100 value 120.065320
## final value 120.065320
## stopped after 100 iterations
## # weights: 11
## initial value 347.404779
```

```
## iter 10 value 230.352619
## iter 20 value 227.544645
## iter 30 value 225.920168
## iter 40 value 216.574205
## iter 50 value 215.434948
## iter 60 value 215.380643
## iter 70 value 215.346426
## iter 80 value 215.345884
## iter 80 value 215.345882
## iter 80 value 215.345882
## final value 215.345882
## converged
## # weights: 31
## initial value 321.528195
## iter 10 value 222.470661
## iter 20 value 211.575650
## iter 30 value 204.783665
## iter 40 value 199.326615
## iter 50 value 198.027925
## iter 60 value 196.738824
## iter 70 value 190.446539
## iter 80 value 188.809621
## iter 90 value 188.611894
## iter 100 value 188.353695
## final value 188.353695
## stopped after 100 iterations
## # weights: 51
## initial value 393.236491
## iter 10 value 199.222543
## iter 20 value 181.533427
## iter 30 value 173.674697
## iter 40 value 170.262506
## iter 50 value 165.782861
## iter 60 value 158.920080
## iter 70 value 153.957119
## iter 80 value 152.709695
## iter 90 value 151.772862
## iter 100 value 151.196693
## final value 151.196693
## stopped after 100 iterations
## # weights: 71
## initial value 406.835188
## iter 10 value 204.046177
## iter 20 value 172.645743
## iter 30 value 156.803622
## iter 40 value 147.128785
## iter 50 value 137.636444
## iter 60 value 134.903569
## iter 70 value 134.340987
## iter 80 value 133.853524
## iter 90 value 133.637975
## iter 100 value 133.256524
## final value 133.256524
## stopped after 100 iterations
```

```
## # weights:  91
## initial  value 463.192068
## iter   10 value 203.626715
## iter   20 value 157.500336
## iter   30 value 129.191049
## iter   40 value 107.723685
## iter   50 value  97.288800
## iter   60 value  93.950638
## iter   70 value  88.278655
## iter   80 value  83.926843
## iter   90 value  83.455025
## iter  100 value  83.138178
## final   value  83.138178
## stopped after 100 iterations
## # weights:  11
## initial  value 433.841878
## iter   10 value 234.503667
## iter   20 value 217.722153
## iter   30 value 216.957536
## iter   40 value 216.828154
## iter   40 value 216.828153
## iter   40 value 216.828153
## final   value 216.828153
## converged
## # weights:  31
## initial  value 446.984964
## iter   10 value 209.663187
## iter   20 value 204.108554
## iter   30 value 201.931222
## iter   40 value 199.523362
## iter   50 value 188.209797
## iter   60 value 184.053287
## iter   70 value 184.021983
## iter   80 value 184.019918
## iter   90 value 184.018829
## final   value 184.018825
## converged
## # weights:  51
## initial  value 368.519109
## iter   10 value 213.266831
## iter   20 value 196.853019
## iter   30 value 182.766197
## iter   40 value 175.275230
## iter   50 value 167.050344
## iter   60 value 160.485047
## iter   70 value 157.532014
## iter   80 value 156.579041
## iter   90 value 156.518559
## iter  100 value 156.502002
## final   value 156.502002
## stopped after 100 iterations
## # weights:  71
## initial  value 520.225738
## iter   10 value 208.266051
```

```
## iter 20 value 176.769473
## iter 30 value 155.144493
## iter 40 value 137.962268
## iter 50 value 128.201721
## iter 60 value 123.488728
## iter 70 value 121.563099
## iter 80 value 120.720506
## iter 90 value 120.502941
## iter 100 value 120.439249
## final value 120.439249
## stopped after 100 iterations
## # weights: 91
## initial value 352.727232
## iter 10 value 207.307337
## iter 20 value 174.166171
## iter 30 value 139.185578
## iter 40 value 112.797548
## iter 50 value 99.102456
## iter 60 value 94.119357
## iter 70 value 91.086674
## iter 80 value 89.171300
## iter 90 value 87.481288
## iter 100 value 85.706906
## final value 85.706906
## stopped after 100 iterations
## # weights: 11
## initial value 338.837582
## iter 10 value 227.518859
## iter 20 value 220.568861
## iter 30 value 220.523286
## final value 220.520573
## converged
## # weights: 31
## initial value 326.915057
## iter 10 value 212.783964
## iter 20 value 206.693861
## iter 30 value 206.248528
## iter 40 value 206.086990
## iter 50 value 204.912093
## iter 60 value 201.658151
## iter 70 value 201.202429
## iter 80 value 200.815297
## iter 90 value 200.770409
## final value 200.768084
## converged
## # weights: 51
## initial value 341.048149
## iter 10 value 234.477071
## iter 20 value 216.364286
## iter 30 value 206.555004
## iter 40 value 204.603424
## iter 50 value 201.959958
## iter 60 value 198.397683
## iter 70 value 193.173374
```

```
## iter 80 value 191.811506
## iter 90 value 191.596852
## iter 100 value 191.554365
## final value 191.554365
## stopped after 100 iterations
## # weights: 71
## initial value 328.504061
## iter 10 value 224.912462
## iter 20 value 205.527467
## iter 30 value 194.584043
## iter 40 value 191.013753
## iter 50 value 188.011805
## iter 60 value 185.684340
## iter 70 value 184.908483
## iter 80 value 184.625424
## iter 90 value 184.432588
## iter 100 value 184.408718
## final value 184.408718
## stopped after 100 iterations
## # weights: 91
## initial value 405.375685
## iter 10 value 216.722123
## iter 20 value 195.862004
## iter 30 value 186.416098
## iter 40 value 181.076587
## iter 50 value 178.385990
## iter 60 value 173.551061
## iter 70 value 172.408099
## iter 80 value 171.748820
## iter 90 value 171.464811
## iter 100 value 171.323264
## final value 171.323264
## stopped after 100 iterations
## # weights: 11
## initial value 392.268258
## iter 10 value 233.974198
## iter 20 value 227.445195
## iter 30 value 225.830780
## iter 40 value 218.539452
## iter 50 value 217.400718
## final value 217.286976
## converged
## # weights: 31
## initial value 330.452408
## iter 10 value 222.659155
## iter 20 value 204.961514
## iter 30 value 196.885444
## iter 40 value 194.885432
## iter 50 value 192.251543
## iter 60 value 191.483253
## iter 70 value 191.465942
## iter 80 value 191.453055
## iter 90 value 191.437530
## final value 191.436409
```



```
## converged
## # weights:  51
## initial  value 332.712184
## iter   10 value 206.123231
## iter   20 value 191.351209
## iter   30 value 183.872086
## iter   40 value 179.670594
## iter   50 value 177.565698
## iter   60 value 176.302430
## iter   70 value 175.927525
## iter   80 value 175.906868
## iter   90 value 175.856389
## iter  100 value 175.620173
## final   value 175.620173
## stopped after 100 iterations
## # weights:  71
## initial  value 403.159663
## iter   10 value 216.659908
## iter   20 value 194.799376
## iter   30 value 180.071975
## iter   40 value 164.260251
## iter   50 value 152.409826
## iter   60 value 150.048191
## iter   70 value 148.765003
## iter   80 value 146.721877
## iter   90 value 144.703376
## iter  100 value 143.792653
## final   value 143.792653
## stopped after 100 iterations
## # weights:  91
## initial  value 510.069498
## iter   10 value 207.685587
## iter   20 value 178.905027
## iter   30 value 158.187629
## iter   40 value 140.538821
## iter   50 value 132.811188
## iter   60 value 127.159029
## iter   70 value 124.873479
## iter   80 value 124.270105
## iter   90 value 123.736707
## iter  100 value 123.005707
## final   value 123.005707
## stopped after 100 iterations
## # weights:  11
## initial  value 315.487617
## iter   10 value 232.208636
## iter   20 value 225.365204
## iter   30 value 225.211875
## iter   40 value 224.830568
## iter   50 value 218.224978
## iter   60 value 216.925343
## final   value 216.876353
## converged
## # weights:  31
```

```
## initial value 409.843342
## iter 10 value 210.576353
## iter 20 value 196.282243
## iter 30 value 194.498685
## iter 40 value 192.648452
## iter 50 value 190.431619
## iter 60 value 189.831738
## iter 70 value 189.539849
## iter 80 value 189.490145
## iter 90 value 189.422656
## final value 189.422238
## converged
## # weights: 51
## initial value 303.705206
## iter 10 value 207.940474
## iter 20 value 178.509484
## iter 30 value 166.124913
## iter 40 value 160.580899
## iter 50 value 159.676701
## iter 60 value 159.551615
## iter 70 value 159.388478
## iter 80 value 159.333819
## iter 90 value 159.331772
## iter 100 value 159.330933
## final value 159.330933
## stopped after 100 iterations
## # weights: 71
## initial value 317.930886
## iter 10 value 206.698371
## iter 20 value 183.675919
## iter 30 value 166.194304
## iter 40 value 153.580771
## iter 50 value 146.581645
## iter 60 value 143.028170
## iter 70 value 141.919816
## iter 80 value 141.528931
## iter 90 value 141.038045
## iter 100 value 140.674283
## final value 140.674283
## stopped after 100 iterations
## # weights: 91
## initial value 328.344333
## iter 10 value 199.577197
## iter 20 value 170.289969
## iter 30 value 137.066221
## iter 40 value 114.317677
## iter 50 value 107.849606
## iter 60 value 106.786386
## iter 70 value 105.700793
## iter 80 value 104.176909
## iter 90 value 103.727819
## iter 100 value 103.199197
## final value 103.199197
## stopped after 100 iterations
```

```
## # weights: 11
## initial value 331.769942
## iter 10 value 223.196643
## iter 20 value 216.892855
## iter 30 value 216.843134
## final value 216.833001
## converged
## # weights: 31
## initial value 314.360356
## iter 10 value 210.488326
## iter 20 value 196.107092
## iter 30 value 191.031705
## iter 40 value 188.206043
## iter 50 value 181.518082
## iter 60 value 180.410584
## iter 70 value 180.304858
## iter 80 value 180.116440
## iter 90 value 179.389199
## iter 100 value 179.053838
## final value 179.053838
## stopped after 100 iterations
## # weights: 51
## initial value 329.650280
## iter 10 value 207.280715
## iter 20 value 186.724159
## iter 30 value 177.633964
## iter 40 value 170.521228
## iter 50 value 159.365087
## iter 60 value 157.589106
## iter 70 value 156.999006
## iter 80 value 156.863357
## iter 90 value 156.570672
## iter 100 value 156.097739
## final value 156.097739
## stopped after 100 iterations
## # weights: 71
## initial value 403.929080
## iter 10 value 216.863522
## iter 20 value 182.513754
## iter 30 value 160.405845
## iter 40 value 138.930151
## iter 50 value 133.089843
## iter 60 value 127.023069
## iter 70 value 119.218015
## iter 80 value 110.155876
## iter 90 value 102.857948
## iter 100 value 101.748282
## final value 101.748282
## stopped after 100 iterations
## # weights: 91
## initial value 491.032090
## iter 10 value 203.353091
## iter 20 value 173.216701
## iter 30 value 146.472643
```

```
## iter 40 value 130.184078
## iter 50 value 121.930047
## iter 60 value 116.894538
## iter 70 value 113.127138
## iter 80 value 110.891922
## iter 90 value 110.335713
## iter 100 value 109.868160
## final value 109.868160
## stopped after 100 iterations
## # weights: 11
## initial value 378.944033
## iter 10 value 235.558165
## iter 20 value 230.781472
## iter 30 value 229.591629
## iter 40 value 219.345824
## iter 50 value 217.893192
## iter 60 value 217.873221
## final value 217.873219
## converged
## # weights: 31
## initial value 346.402457
## iter 10 value 217.753567
## iter 20 value 205.325462
## iter 30 value 198.947214
## iter 40 value 196.849835
## iter 50 value 191.678833
## iter 60 value 189.779713
## iter 70 value 187.918435
## iter 80 value 187.517816
## iter 90 value 186.588139
## iter 100 value 181.717809
## final value 181.717809
## stopped after 100 iterations
## # weights: 51
## initial value 399.181166
## iter 10 value 207.781093
## iter 20 value 188.901379
## iter 30 value 162.077737
## iter 40 value 152.857117
## iter 50 value 146.695077
## iter 60 value 143.937824
## iter 70 value 141.574819
## iter 80 value 137.444387
## iter 90 value 132.379067
## iter 100 value 130.486973
## final value 130.486973
## stopped after 100 iterations
## # weights: 71
## initial value 324.641111
## iter 10 value 217.980560
## iter 20 value 192.753094
## iter 30 value 182.201996
## iter 40 value 173.455352
## iter 50 value 164.049277
```

```
## iter 60 value 153.570954
## iter 70 value 143.158290
## iter 80 value 138.991313
## iter 90 value 135.370796
## iter 100 value 127.882420
## final value 127.882420
## stopped after 100 iterations
## # weights: 91
## initial value 341.243873
## iter 10 value 210.137893
## iter 20 value 176.887548
## iter 30 value 142.486949
## iter 40 value 129.963740
## iter 50 value 117.451243
## iter 60 value 108.812394
## iter 70 value 102.327357
## iter 80 value 97.502645
## iter 90 value 91.666537
## iter 100 value 86.536573
## final value 86.536573
## stopped after 100 iterations
## # weights: 11
## initial value 324.963759
## iter 10 value 227.581819
## iter 20 value 221.449143
## iter 30 value 221.198359
## iter 40 value 221.198201
## final value 221.198147
## converged
## # weights: 31
## initial value 402.814233
## iter 10 value 229.374369
## iter 20 value 217.241702
## iter 30 value 211.644265
## iter 40 value 208.314043
## iter 50 value 206.455089
## iter 60 value 206.402442
## final value 206.402236
## converged
## # weights: 51
## initial value 324.865003
## iter 10 value 221.867399
## iter 20 value 208.164755
## iter 30 value 202.366359
## iter 40 value 198.011580
## iter 50 value 194.002941
## iter 60 value 192.437248
## iter 70 value 191.551814
## iter 80 value 191.188479
## iter 90 value 191.135736
## final value 191.135282
## converged
## # weights: 71
## initial value 367.838062
```

```
## iter 10 value 213.856356
## iter 20 value 199.627621
## iter 30 value 192.344085
## iter 40 value 184.877513
## iter 50 value 181.656762
## iter 60 value 180.753518
## iter 70 value 180.179696
## iter 80 value 180.053045
## iter 90 value 179.893522
## iter 100 value 179.837448
## final value 179.837448
## stopped after 100 iterations
## # weights: 91
## initial value 650.606590
## iter 10 value 217.913423
## iter 20 value 192.442915
## iter 30 value 180.578438
## iter 40 value 174.506699
## iter 50 value 171.709740
## iter 60 value 170.834952
## iter 70 value 168.696216
## iter 80 value 166.696583
## iter 90 value 166.395014
## iter 100 value 166.324495
## final value 166.324495
## stopped after 100 iterations
## # weights: 11
## initial value 314.318100
## iter 10 value 223.492186
## iter 20 value 218.415009
## iter 30 value 218.257951
## final value 218.257947
## converged
## # weights: 31
## initial value 363.937367
## iter 10 value 225.015116
## iter 20 value 212.520756
## iter 30 value 200.297400
## iter 40 value 198.884480
## iter 50 value 198.723341
## iter 60 value 198.580203
## iter 70 value 198.549175
## iter 80 value 198.548919
## final value 198.548872
## converged
## # weights: 51
## initial value 305.485802
## iter 10 value 214.249225
## iter 20 value 191.144675
## iter 30 value 171.629693
## iter 40 value 168.087615
## iter 50 value 166.777675
## iter 60 value 166.554016
## iter 70 value 166.464184
```

```
## iter 80 value 166.444248
## iter 90 value 166.442102
## iter 100 value 166.441371
## final value 166.441371
## stopped after 100 iterations
## # weights: 71
## initial value 723.788316
## iter 10 value 198.501449
## iter 20 value 170.351495
## iter 30 value 161.712429
## iter 40 value 157.352971
## iter 50 value 155.630282
## iter 60 value 153.729003
## iter 70 value 153.039323
## iter 80 value 150.564768
## iter 90 value 149.621329
## iter 100 value 149.292293
## final value 149.292293
## stopped after 100 iterations
## # weights: 91
## initial value 318.453656
## iter 10 value 212.799836
## iter 20 value 184.419352
## iter 30 value 163.669700
## iter 40 value 153.568411
## iter 50 value 150.668599
## iter 60 value 149.176925
## iter 70 value 148.218753
## iter 80 value 147.973328
## iter 90 value 147.440653
## iter 100 value 146.412926
## final value 146.412926
## stopped after 100 iterations
## # weights: 11
## initial value 322.612885
## iter 10 value 220.313596
## iter 20 value 218.025335
## iter 30 value 217.913532
## final value 217.912755
## converged
## # weights: 31
## initial value 379.112838
## iter 10 value 212.747457
## iter 20 value 200.107434
## iter 30 value 193.223807
## iter 40 value 190.633784
## iter 50 value 189.706437
## iter 60 value 189.637170
## iter 70 value 189.617725
## iter 80 value 189.545653
## iter 90 value 189.398735
## iter 100 value 189.348999
## final value 189.348999
## stopped after 100 iterations
```

```
## # weights:  51
## initial  value 364.852284
## iter   10 value 230.542204
## iter   20 value 207.031851
## iter   30 value 194.504411
## iter   40 value 182.239289
## iter   50 value 178.994430
## iter   60 value 175.060858
## iter   70 value 173.949513
## iter   80 value 173.167272
## iter   90 value 172.673744
## iter  100 value 171.566619
## final   value 171.566619
## stopped after 100 iterations
## # weights:  71
## initial  value 363.061425
## iter   10 value 215.635186
## iter   20 value 190.476088
## iter   30 value 168.524231
## iter   40 value 151.700819
## iter   50 value 136.723854
## iter   60 value 131.809642
## iter   70 value 130.121106
## iter   80 value 128.999319
## iter   90 value 128.600524
## iter  100 value 128.198891
## final   value 128.198891
## stopped after 100 iterations
## # weights:  91
## initial  value 344.850678
## iter   10 value 206.076953
## iter   20 value 177.595809
## iter   30 value 141.292164
## iter   40 value 128.389513
## iter   50 value 123.738539
## iter   60 value 122.241440
## iter   70 value 119.791719
## iter   80 value 118.888472
## iter   90 value 118.500809
## iter  100 value 118.302992
## final   value 118.302992
## stopped after 100 iterations
## # weights:  11
## initial  value 326.282984
## iter   10 value 236.399670
## iter   20 value 219.186830
## iter   30 value 217.969314
## final   value 217.877184
## converged
## # weights:  31
## initial  value 447.328008
## iter   10 value 212.274360
## iter   20 value 196.793235
## iter   30 value 192.598702
```



```
## iter 40 value 188.281818
## iter 50 value 186.916946
## iter 60 value 186.558245
## iter 70 value 186.477757
## iter 80 value 185.834508
## iter 90 value 184.656832
## iter 100 value 184.544748
## final value 184.544748
## stopped after 100 iterations
## # weights: 51
## initial value 339.784070
## iter 10 value 207.402724
## iter 20 value 187.182263
## iter 30 value 178.099172
## iter 40 value 172.637400
## iter 50 value 163.741865
## iter 60 value 160.228230
## iter 70 value 160.000435
## iter 80 value 159.838255
## iter 90 value 159.780989
## iter 100 value 159.704799
## final value 159.704799
## stopped after 100 iterations
## # weights: 71
## initial value 336.984068
## iter 10 value 209.758621
## iter 20 value 163.199984
## iter 30 value 145.194738
## iter 40 value 134.475235
## iter 50 value 125.823611
## iter 60 value 124.629980
## iter 70 value 124.282832
## iter 80 value 124.092167
## iter 90 value 123.874336
## iter 100 value 123.670873
## final value 123.670873
## stopped after 100 iterations
## # weights: 91
## initial value 411.294444
## iter 10 value 204.505367
## iter 20 value 177.339620
## iter 30 value 146.559360
## iter 40 value 125.885250
## iter 50 value 115.544435
## iter 60 value 110.489124
## iter 70 value 107.587172
## iter 80 value 106.776571
## iter 90 value 106.081788
## iter 100 value 105.746711
## final value 105.746711
## stopped after 100 iterations
## # weights: 11
## initial value 366.967595
## iter 10 value 235.899693
```

```
## iter 20 value 222.227305
## iter 30 value 217.303999
## iter 40 value 216.622038
## final value 216.584359
## converged
## # weights: 31
## initial value 312.050345
## iter 10 value 219.873682
## iter 20 value 205.084630
## iter 30 value 197.748357
## iter 40 value 192.496908
## iter 50 value 186.610885
## iter 60 value 185.310158
## iter 70 value 184.627277
## iter 80 value 183.622484
## iter 90 value 183.077644
## iter 100 value 181.329526
## final value 181.329526
## stopped after 100 iterations
## # weights: 51
## initial value 366.313394
## iter 10 value 216.645516
## iter 20 value 198.083360
## iter 30 value 186.498551
## iter 40 value 172.856744
## iter 50 value 166.833890
## iter 60 value 163.231575
## iter 70 value 160.577445
## iter 80 value 159.010484
## iter 90 value 157.981312
## iter 100 value 156.729973
## final value 156.729973
## stopped after 100 iterations
## # weights: 71
## initial value 301.001820
## iter 10 value 207.167709
## iter 20 value 172.838245
## iter 30 value 152.204040
## iter 40 value 139.461947
## iter 50 value 129.218065
## iter 60 value 116.755592
## iter 70 value 110.149148
## iter 80 value 108.451561
## iter 90 value 108.352821
## iter 100 value 108.351790
## final value 108.351790
## stopped after 100 iterations
## # weights: 91
## initial value 347.723947
## iter 10 value 205.456013
## iter 20 value 169.843891
## iter 30 value 146.821324
## iter 40 value 105.818141
## iter 50 value 92.606156
```

```
## iter 60 value 87.942738
## iter 70 value 82.052865
## iter 80 value 74.887568
## iter 90 value 70.711867
## iter 100 value 69.160754
## final value 69.160754
## stopped after 100 iterations
## # weights: 11
## initial value 419.981414
## iter 10 value 224.925371
## iter 20 value 220.288071
## iter 30 value 220.168168
## final value 220.162819
## converged
## # weights: 31
## initial value 318.409989
## iter 10 value 224.792358
## iter 20 value 218.053189
## iter 30 value 211.822797
## iter 40 value 208.209686
## iter 50 value 206.383179
## iter 60 value 204.754860
## iter 70 value 204.630417
## iter 80 value 204.614705
## final value 204.613247
## converged
## # weights: 51
## initial value 312.973192
## iter 10 value 211.374609
## iter 20 value 198.124381
## iter 30 value 192.898355
## iter 40 value 187.405658
## iter 50 value 185.300507
## iter 60 value 184.384651
## iter 70 value 183.765663
## iter 80 value 183.465029
## iter 90 value 183.402494
## iter 100 value 183.396137
## final value 183.396137
## stopped after 100 iterations
## # weights: 71
## initial value 321.932520
## iter 10 value 210.568588
## iter 20 value 191.572837
## iter 30 value 185.275417
## iter 40 value 180.741205
## iter 50 value 178.633028
## iter 60 value 177.334527
## iter 70 value 176.630082
## iter 80 value 175.666879
## iter 90 value 175.120641
## iter 100 value 174.962305
## final value 174.962305
## stopped after 100 iterations
```

```
## # weights:  91
## initial  value 320.159928
## iter   10 value 215.187464
## iter   20 value 195.179570
## iter   30 value 181.466679
## iter   40 value 175.179363
## iter   50 value 172.789535
## iter   60 value 171.680141
## iter   70 value 170.005882
## iter   80 value 169.845833
## iter   90 value 169.806075
## iter  100 value 169.798336
## final   value 169.798336
## stopped after 100 iterations
## # weights:  11
## initial  value 358.916244
## iter   10 value 221.340355
## iter   20 value 217.111240
## iter   30 value 217.015557
## iter   40 value 217.014443
## iter   40 value 217.014442
## iter   40 value 217.014442
## final   value 217.014442
## converged
## # weights:  31
## initial  value 320.266264
## iter   10 value 214.569907
## iter   20 value 196.088711
## iter   30 value 190.350879
## iter   40 value 189.501295
## iter   50 value 187.237439
## iter   60 value 186.551174
## iter   70 value 186.413473
## iter   80 value 186.409508
## final   value 186.409500
## converged
## # weights:  51
## initial  value 317.934115
## iter   10 value 221.197219
## iter   20 value 201.490529
## iter   30 value 190.083675
## iter   40 value 178.921710
## iter   50 value 173.522111
## iter   60 value 172.410698
## iter   70 value 171.573644
## iter   80 value 171.136624
## iter   90 value 169.174022
## iter  100 value 165.619392
## final   value 165.619392
## stopped after 100 iterations
## # weights:  71
## initial  value 399.675350
## iter   10 value 213.773598
## iter   20 value 187.187437
```

```
## iter 30 value 165.993609
## iter 40 value 157.105123
## iter 50 value 153.507324
## iter 60 value 149.252881
## iter 70 value 146.937062
## iter 80 value 146.296794
## iter 90 value 146.046641
## iter 100 value 145.911632
## final value 145.911632
## stopped after 100 iterations
## # weights: 91
## initial value 320.968435
## iter 10 value 205.017120
## iter 20 value 181.093875
## iter 30 value 154.296592
## iter 40 value 133.743909
## iter 50 value 128.458367
## iter 60 value 125.387454
## iter 70 value 123.688963
## iter 80 value 123.115361
## iter 90 value 122.800012
## iter 100 value 122.686278
## final value 122.686278
## stopped after 100 iterations
## # weights: 11
## initial value 419.868901
## iter 10 value 235.417650
## iter 20 value 231.284705
## iter 30 value 228.988311
## iter 40 value 225.912140
## iter 50 value 217.619319
## iter 60 value 216.670626
## final value 216.629054
## converged
## # weights: 31
## initial value 409.170552
## iter 10 value 209.361150
## iter 20 value 194.303804
## iter 30 value 187.332724
## iter 40 value 185.331509
## iter 50 value 184.224408
## iter 60 value 184.000239
## iter 70 value 183.930632
## iter 80 value 183.917959
## iter 90 value 183.874308
## iter 100 value 183.872762
## final value 183.872762
## stopped after 100 iterations
## # weights: 51
## initial value 336.277015
## iter 10 value 206.215584
## iter 20 value 176.339571
## iter 30 value 164.810770
## iter 40 value 161.200615
```

```
## iter 50 value 158.993081
## iter 60 value 158.182773
## iter 70 value 157.890876
## iter 80 value 157.314170
## iter 90 value 157.297342
## iter 100 value 157.289134
## final value 157.289134
## stopped after 100 iterations
## # weights: 71
## initial value 353.844926
## iter 10 value 201.096648
## iter 20 value 168.089117
## iter 30 value 149.035569
## iter 40 value 140.418505
## iter 50 value 135.127396
## iter 60 value 133.600405
## iter 70 value 131.232960
## iter 80 value 130.749744
## iter 90 value 130.242877
## iter 100 value 130.108370
## final value 130.108370
## stopped after 100 iterations
## # weights: 91
## initial value 350.531079
## iter 10 value 202.977520
## iter 20 value 161.022167
## iter 30 value 136.680382
## iter 40 value 127.064960
## iter 50 value 115.322152
## iter 60 value 112.489500
## iter 70 value 110.212573
## iter 80 value 108.988946
## iter 90 value 108.271027
## iter 100 value 108.065309
## final value 108.065309
## stopped after 100 iterations
## # weights: 11
## initial value 340.257014
## iter 10 value 218.908269
## iter 20 value 216.640944
## iter 30 value 216.592775
## final value 216.588848
## converged
## # weights: 31
## initial value 318.095811
## iter 10 value 210.087314
## iter 20 value 200.732960
## iter 30 value 195.837264
## iter 40 value 194.024582
## iter 50 value 192.128551
## iter 60 value 189.591603
## iter 70 value 188.624419
## iter 80 value 188.039755
## iter 90 value 187.888602
```

```
## iter 100 value 187.785583
## final value 187.785583
## stopped after 100 iterations
## # weights: 51
## initial value 376.313596
## iter 10 value 204.850317
## iter 20 value 182.239527
## iter 30 value 174.954698
## iter 40 value 168.782128
## iter 50 value 162.708987
## iter 60 value 160.490009
## iter 70 value 156.579965
## iter 80 value 154.348858
## iter 90 value 153.901367
## iter 100 value 153.779695
## final value 153.779695
## stopped after 100 iterations
## # weights: 71
## initial value 457.339941
## iter 10 value 205.130707
## iter 20 value 175.271340
## iter 30 value 151.396828
## iter 40 value 143.766906
## iter 50 value 137.062081
## iter 60 value 133.331657
## iter 70 value 131.553755
## iter 80 value 130.802065
## iter 90 value 130.304547
## iter 100 value 129.638804
## final value 129.638804
## stopped after 100 iterations
## # weights: 91
## initial value 312.355801
## iter 10 value 209.655423
## iter 20 value 178.632825
## iter 30 value 147.760211
## iter 40 value 131.621083
## iter 50 value 124.127694
## iter 60 value 117.432707
## iter 70 value 116.743286
## iter 80 value 116.598724
## iter 90 value 116.320552
## iter 100 value 115.874381
## final value 115.874381
## stopped after 100 iterations
## # weights: 11
## initial value 398.130985
## iter 10 value 238.325908
## iter 20 value 228.171780
## iter 30 value 228.067619
## iter 40 value 226.538828
## iter 50 value 225.251770
## iter 60 value 223.019932
## iter 70 value 221.849926
```

```
## iter 80 value 221.747691
## final value 221.735670
## converged
## # weights: 31
## initial value 432.910413
## iter 10 value 225.717565
## iter 20 value 200.919814
## iter 30 value 194.848558
## iter 40 value 186.505543
## iter 50 value 184.093873
## iter 60 value 179.976307
## iter 70 value 179.441307
## iter 80 value 179.426227
## iter 90 value 179.417469
## iter 100 value 179.416641
## final value 179.416641
## stopped after 100 iterations
## # weights: 51
## initial value 313.666314
## iter 10 value 211.088855
## iter 20 value 186.787608
## iter 30 value 177.395455
## iter 40 value 171.452625
## iter 50 value 168.351041
## iter 60 value 165.019348
## iter 70 value 163.935457
## iter 80 value 162.022075
## iter 90 value 160.097357
## iter 100 value 159.371684
## final value 159.371684
## stopped after 100 iterations
## # weights: 71
## initial value 362.257199
## iter 10 value 209.916377
## iter 20 value 172.865250
## iter 30 value 159.974861
## iter 40 value 145.247999
## iter 50 value 134.027665
## iter 60 value 129.349872
## iter 70 value 123.013705
## iter 80 value 116.660781
## iter 90 value 115.674291
## iter 100 value 115.450969
## final value 115.450969
## stopped after 100 iterations
## # weights: 91
## initial value 372.971244
## iter 10 value 211.559169
## iter 20 value 171.412886
## iter 30 value 134.734520
## iter 40 value 114.000224
## iter 50 value 101.040786
## iter 60 value 96.764687
## iter 70 value 93.690780
```



```
## iter 80 value 90.024443
## iter 90 value 82.253998
## iter 100 value 77.998981
## final value 77.998981
## stopped after 100 iterations
## # weights: 11
## initial value 316.702259
## iter 10 value 227.336657
## iter 20 value 223.106869
## iter 30 value 223.094417
## final value 223.093973
## converged
## # weights: 31
## initial value 393.306815
## iter 10 value 231.843635
## iter 20 value 212.948347
## iter 30 value 210.120711
## iter 40 value 207.569055
## iter 50 value 205.577904
## iter 60 value 205.475511
## iter 70 value 205.473352
## final value 205.473319
## converged
## # weights: 51
## initial value 337.978285
## iter 10 value 214.131102
## iter 20 value 202.644980
## iter 30 value 194.002579
## iter 40 value 191.937756
## iter 50 value 191.084443
## iter 60 value 190.287925
## iter 70 value 189.536901
## iter 80 value 189.423326
## iter 90 value 189.404693
## final value 189.404684
## converged
## # weights: 71
## initial value 357.407039
## iter 10 value 209.860062
## iter 20 value 196.408882
## iter 30 value 190.522998
## iter 40 value 185.412586
## iter 50 value 180.160566
## iter 60 value 179.193868
## iter 70 value 178.960121
## iter 80 value 178.903341
## iter 90 value 178.897960
## iter 100 value 178.894713
## final value 178.894713
## stopped after 100 iterations
## # weights: 91
## initial value 364.199413
## iter 10 value 225.892727
## iter 20 value 200.996625
```

```
## iter 30 value 191.033500
## iter 40 value 184.860444
## iter 50 value 182.132210
## iter 60 value 180.608623
## iter 70 value 179.224829
## iter 80 value 178.777611
## iter 90 value 178.637212
## iter 100 value 178.605804
## final value 178.605804
## stopped after 100 iterations
## # weights: 11
## initial value 319.782583
## iter 10 value 226.438795
## iter 20 value 219.906540
## iter 30 value 219.541030
## final value 219.527454
## converged
## # weights: 31
## initial value 403.837833
## iter 10 value 212.236137
## iter 20 value 206.898776
## iter 30 value 198.500818
## iter 40 value 196.976228
## iter 50 value 196.456606
## iter 60 value 196.369269
## iter 70 value 196.355575
## iter 70 value 196.355575
## iter 70 value 196.355575
## final value 196.355575
## converged
## # weights: 51
## initial value 567.635107
## iter 10 value 207.084623
## iter 20 value 183.739099
## iter 30 value 169.472705
## iter 40 value 165.887995
## iter 50 value 164.791351
## iter 60 value 163.826248
## iter 70 value 163.656715
## iter 80 value 163.582450
## iter 90 value 163.579313
## final value 163.579306
## converged
## # weights: 71
## initial value 409.329176
## iter 10 value 207.049003
## iter 20 value 178.578871
## iter 30 value 160.555299
## iter 40 value 156.441873
## iter 50 value 154.452504
## iter 60 value 152.367454
## iter 70 value 151.954562
## iter 80 value 151.736330
## iter 90 value 151.280801
```

```
## iter 100 value 150.440831
## final value 150.440831
## stopped after 100 iterations
## # weights: 91
## initial value 346.527355
## iter 10 value 209.439768
## iter 20 value 175.362016
## iter 30 value 156.197104
## iter 40 value 144.786340
## iter 50 value 134.541683
## iter 60 value 129.125895
## iter 70 value 127.927375
## iter 80 value 127.077419
## iter 90 value 126.428953
## iter 100 value 124.624952
## final value 124.624952
## stopped after 100 iterations
## # weights: 11
## initial value 336.810918
## iter 10 value 225.112009
## iter 20 value 219.415444
## iter 30 value 219.113765
## final value 219.098846
## converged
## # weights: 31
## initial value 346.465224
## iter 10 value 211.443468
## iter 20 value 206.526222
## iter 30 value 201.240263
## iter 40 value 192.438140
## iter 50 value 189.810379
## iter 60 value 186.149401
## iter 70 value 185.984077
## iter 80 value 185.949565
## iter 90 value 185.896684
## iter 100 value 185.888021
## final value 185.888021
## stopped after 100 iterations
## # weights: 51
## initial value 310.542794
## iter 10 value 208.870817
## iter 20 value 185.736030
## iter 30 value 172.139025
## iter 40 value 167.967388
## iter 50 value 163.207211
## iter 60 value 162.200436
## iter 70 value 161.537666
## iter 80 value 161.197507
## iter 90 value 161.040527
## iter 100 value 160.881675
## final value 160.881675
## stopped after 100 iterations
## # weights: 71
## initial value 367.050792
```

```
## iter 10 value 206.089775
## iter 20 value 177.724053
## iter 30 value 162.823881
## iter 40 value 153.977614
## iter 50 value 145.959665
## iter 60 value 143.836972
## iter 70 value 143.060820
## iter 80 value 142.318602
## iter 90 value 141.558480
## iter 100 value 141.472958
## final value 141.472958
## stopped after 100 iterations
## # weights: 91
## initial value 434.161248
## iter 10 value 207.803595
## iter 20 value 180.245633
## iter 30 value 142.554055
## iter 40 value 122.257459
## iter 50 value 109.360553
## iter 60 value 106.172962
## iter 70 value 104.541941
## iter 80 value 103.164445
## iter 90 value 102.275166
## iter 100 value 101.487559
## final value 101.487559
## stopped after 100 iterations
## # weights: 11
## initial value 399.071302
## iter 10 value 221.037885
## iter 20 value 219.096104
## iter 30 value 219.053202
## final value 219.053186
## converged
## # weights: 31
## initial value 321.206505
## iter 10 value 219.287980
## iter 20 value 207.134920
## iter 30 value 201.468404
## iter 40 value 192.797944
## iter 50 value 186.351664
## iter 60 value 183.535731
## iter 70 value 182.878135
## iter 80 value 182.283025
## iter 90 value 181.986405
## iter 100 value 181.923203
## final value 181.923203
## stopped after 100 iterations
## # weights: 51
## initial value 339.252614
## iter 10 value 206.980822
## iter 20 value 193.246527
## iter 30 value 181.804704
## iter 40 value 171.774093
## iter 50 value 165.059145
```

```
## iter 60 value 160.134494
## iter 70 value 158.579315
## iter 80 value 158.234445
## iter 90 value 157.973636
## iter 100 value 157.871547
## final value 157.871547
## stopped after 100 iterations
## # weights: 71
## initial value 304.237538
## iter 10 value 207.107528
## iter 20 value 180.564654
## iter 30 value 157.500285
## iter 40 value 147.738311
## iter 50 value 142.516504
## iter 60 value 136.044131
## iter 70 value 132.396374
## iter 80 value 131.705191
## iter 90 value 131.556775
## iter 100 value 131.472549
## final value 131.472549
## stopped after 100 iterations
## # weights: 91
## initial value 322.615379
## iter 10 value 206.244851
## iter 20 value 173.633372
## iter 30 value 142.964117
## iter 40 value 124.517963
## iter 50 value 109.604850
## iter 60 value 100.623077
## iter 70 value 94.743718
## iter 80 value 91.513718
## iter 90 value 81.857481
## iter 100 value 79.016328
## final value 79.016328
## stopped after 100 iterations
## # weights: 11
## initial value 368.624443
## iter 10 value 234.308670
## iter 20 value 231.344442
## iter 30 value 227.737543
## iter 40 value 220.589433
## iter 50 value 219.142615
## iter 60 value 219.133752
## final value 219.133617
## converged
## # weights: 31
## initial value 474.067607
## iter 10 value 206.715854
## iter 20 value 199.458813
## iter 30 value 193.860047
## iter 40 value 182.435757
## iter 50 value 178.155555
## iter 60 value 177.986780
## final value 177.986073
```

```
## converged
## # weights:  51
## initial  value 362.942650
## iter   10 value 207.683375
## iter   20 value 182.245652
## iter   30 value 167.675655
## iter   40 value 161.021962
## iter   50 value 155.512446
## iter   60 value 149.715778
## iter   70 value 143.396203
## iter   80 value 140.216175
## iter   90 value 139.985311
## iter  100 value 139.950258
## final   value 139.950258
## stopped after 100 iterations
## # weights:  71
## initial  value 431.716670
## iter   10 value 206.354468
## iter   20 value 182.510952
## iter   30 value 164.946851
## iter   40 value 155.807413
## iter   50 value 148.058089
## iter   60 value 140.175220
## iter   70 value 134.480435
## iter   80 value 129.576021
## iter   90 value 128.550790
## iter  100 value 127.346333
## final   value 127.346333
## stopped after 100 iterations
## # weights:  91
## initial  value 495.194475
## iter   10 value 200.476736
## iter   20 value 161.981710
## iter   30 value 129.724623
## iter   40 value 106.730326
## iter   50 value 97.702177
## iter   60 value 88.893768
## iter   70 value 83.029580
## iter   80 value 79.839351
## iter   90 value 78.388719
## iter  100 value 78.221292
## final   value 78.221292
## stopped after 100 iterations
## # weights:  11
## initial  value 422.413056
## iter   10 value 243.742430
## iter   20 value 222.886091
## iter   30 value 222.783044
## final   value 222.781311
## converged
## # weights:  31
## initial  value 322.994173
## iter   10 value 245.078065
## iter   20 value 215.660753
```

```
## iter 30 value 211.968220
## iter 40 value 210.943531
## iter 50 value 210.207168
## iter 60 value 210.150110
## iter 70 value 210.148714
## iter 70 value 210.148712
## iter 70 value 210.148712
## final value 210.148712
## converged
## # weights: 51
## initial value 328.567867
## iter 10 value 213.603640
## iter 20 value 202.119597
## iter 30 value 194.497844
## iter 40 value 191.919217
## iter 50 value 191.167917
## iter 60 value 191.012118
## iter 70 value 190.958670
## iter 80 value 190.955129
## iter 90 value 190.954567
## iter 90 value 190.954566
## iter 90 value 190.954566
## final value 190.954566
## converged
## # weights: 71
## initial value 475.869344
## iter 10 value 216.933494
## iter 20 value 199.696590
## iter 30 value 190.235083
## iter 40 value 188.688701
## iter 50 value 186.602526
## iter 60 value 184.009099
## iter 70 value 182.965140
## iter 80 value 180.453449
## iter 90 value 179.214505
## iter 100 value 179.046512
## final value 179.046512
## stopped after 100 iterations
## # weights: 91
## initial value 336.020685
## iter 10 value 211.141377
## iter 20 value 192.353343
## iter 30 value 180.673074
## iter 40 value 172.691726
## iter 50 value 169.794759
## iter 60 value 167.367191
## iter 70 value 165.287544
## iter 80 value 164.773609
## iter 90 value 164.683834
## iter 100 value 164.619606
## final value 164.619606
## stopped after 100 iterations
## # weights: 11
## initial value 410.974332
```

```
## iter 10 value 229.651590
## iter 20 value 220.036264
## iter 30 value 219.610178
## final value 219.585719
## converged
## # weights: 31
## initial value 299.104688
## iter 10 value 220.036120
## iter 20 value 204.965426
## iter 30 value 202.558765
## iter 40 value 201.285294
## iter 50 value 200.831412
## iter 60 value 199.537413
## iter 70 value 199.368479
## iter 80 value 199.325635
## iter 90 value 199.312793
## final value 199.312417
## converged
## # weights: 51
## initial value 391.676407
## iter 10 value 214.772541
## iter 20 value 198.705043
## iter 30 value 188.240386
## iter 40 value 185.397209
## iter 50 value 184.493802
## iter 60 value 184.246812
## iter 70 value 184.153848
## iter 80 value 184.112177
## iter 90 value 184.083092
## iter 100 value 184.077019
## final value 184.077019
## stopped after 100 iterations
## # weights: 71
## initial value 342.134225
## iter 10 value 213.020755
## iter 20 value 185.584695
## iter 30 value 171.068848
## iter 40 value 165.230282
## iter 50 value 158.879003
## iter 60 value 156.204389
## iter 70 value 155.636762
## iter 80 value 155.439414
## iter 90 value 154.591703
## iter 100 value 153.756582
## final value 153.756582
## stopped after 100 iterations
## # weights: 91
## initial value 335.602040
## iter 10 value 202.305164
## iter 20 value 173.891927
## iter 30 value 149.395974
## iter 40 value 141.028240
## iter 50 value 135.489873
## iter 60 value 132.773281
```



```
## iter 70 value 128.862006
## iter 80 value 127.000270
## iter 90 value 126.493977
## iter 100 value 126.365686
## final value 126.365686
## stopped after 100 iterations
## # weights: 11
## initial value 311.604973
## iter 10 value 230.664028
## iter 20 value 221.537522
## iter 30 value 219.509696
## iter 40 value 219.181010
## final value 219.180985
## converged
## # weights: 31
## initial value 319.751548
## iter 10 value 222.786336
## iter 20 value 203.865615
## iter 30 value 196.850578
## iter 40 value 195.270211
## iter 50 value 193.132397
## iter 60 value 190.570002
## iter 70 value 189.642175
## iter 80 value 189.599236
## final value 189.599193
## converged
## # weights: 51
## initial value 312.031865
## iter 10 value 212.119606
## iter 20 value 189.993600
## iter 30 value 175.243593
## iter 40 value 170.972821
## iter 50 value 166.431968
## iter 60 value 163.129931
## iter 70 value 162.798011
## iter 80 value 162.129990
## iter 90 value 161.792364
## iter 100 value 160.916741
## final value 160.916741
## stopped after 100 iterations
## # weights: 71
## initial value 331.451039
## iter 10 value 206.551123
## iter 20 value 177.310627
## iter 30 value 147.255420
## iter 40 value 137.694279
## iter 50 value 130.476286
## iter 60 value 127.473512
## iter 70 value 123.456790
## iter 80 value 120.743079
## iter 90 value 119.709720
## iter 100 value 118.933418
## final value 118.933418
## stopped after 100 iterations
```

```
## # weights:  91
## initial  value 349.726358
## iter   10 value 208.887618
## iter   20 value 174.032467
## iter   30 value 141.232803
## iter   40 value 126.437095
## iter   50 value 117.886945
## iter   60 value 114.403267
## iter   70 value 111.325230
## iter   80 value 107.344791
## iter   90 value 106.096159
## iter  100 value 105.647211
## final   value 105.647211
## stopped after 100 iterations
## # weights:  11
## initial  value 316.627869
## iter   10 value 231.542014
## iter   20 value 230.975150
## iter   30 value 222.303827
## iter   40 value 219.351350
## iter   50 value 219.161873
## final   value 219.139917
## converged
## # weights:  31
## initial  value 386.985603
## iter   10 value 210.739503
## iter   20 value 200.835848
## iter   30 value 194.721506
## iter   40 value 193.056135
## iter   50 value 191.717638
## iter   60 value 189.993077
## iter   70 value 189.589952
## iter   80 value 188.785091
## iter   90 value 188.056592
## iter  100 value 184.536855
## final   value 184.536855
## stopped after 100 iterations
## # weights:  51
## initial  value 328.567812
## iter   10 value 216.751186
## iter   20 value 201.085152
## iter   30 value 183.855793
## iter   40 value 171.784239
## iter   50 value 162.235175
## iter   60 value 159.404008
## iter   70 value 154.522603
## iter   80 value 152.765590
## iter   90 value 152.609185
## iter  100 value 152.593259
## final   value 152.593259
## stopped after 100 iterations
## # weights:  71
## initial  value 296.760791
## iter   10 value 208.063758
```

```
## iter 20 value 182.139936
## iter 30 value 152.913675
## iter 40 value 137.505488
## iter 50 value 128.595309
## iter 60 value 125.625541
## iter 70 value 124.985017
## iter 80 value 124.353845
## iter 90 value 124.147815
## iter 100 value 124.061199
## final value 124.061199
## stopped after 100 iterations
## # weights: 91
## initial value 320.593527
## iter 10 value 209.348929
## iter 20 value 181.219344
## iter 30 value 150.702759
## iter 40 value 128.541860
## iter 50 value 118.332740
## iter 60 value 111.716456
## iter 70 value 106.504799
## iter 80 value 102.522992
## iter 90 value 101.115253
## iter 100 value 100.437177
## final value 100.437177
## stopped after 100 iterations
## # weights: 11
## initial value 325.190389
## iter 10 value 227.848192
## iter 20 value 226.263963
## iter 30 value 225.828965
## iter 40 value 221.152640
## final value 220.818164
## converged
## # weights: 31
## initial value 332.908534
## iter 10 value 207.581495
## iter 20 value 197.953090
## iter 30 value 192.647330
## iter 40 value 181.844285
## iter 50 value 179.948802
## iter 60 value 179.625259
## iter 70 value 179.576765
## iter 80 value 179.560066
## iter 90 value 179.556883
## iter 100 value 179.555430
## final value 179.555430
## stopped after 100 iterations
## # weights: 51
## initial value 330.020284
## iter 10 value 206.674959
## iter 20 value 189.677561
## iter 30 value 174.922383
## iter 40 value 171.177587
## iter 50 value 159.948228
```

```
## iter 60 value 153.586927
## iter 70 value 153.271709
## iter 80 value 153.268875
## final value 153.268873
## converged
## # weights: 71
## initial value 338.149300
## iter 10 value 203.991239
## iter 20 value 182.988666
## iter 30 value 164.583103
## iter 40 value 151.962255
## iter 50 value 145.789836
## iter 60 value 132.690242
## iter 70 value 120.925875
## iter 80 value 118.881537
## iter 90 value 118.866427
## final value 118.866054
## converged
## # weights: 91
## initial value 337.541445
## iter 10 value 199.402825
## iter 20 value 162.718071
## iter 30 value 135.007137
## iter 40 value 114.229318
## iter 50 value 103.065778
## iter 60 value 96.451010
## iter 70 value 95.058822
## iter 80 value 95.014645
## iter 90 value 94.999554
## iter 100 value 94.800221
## final value 94.800221
## stopped after 100 iterations
## # weights: 11
## initial value 409.580138
## iter 10 value 227.375595
## iter 20 value 219.433709
## iter 30 value 218.684664
## final value 218.684192
## converged
## # weights: 31
## initial value 329.152970
## iter 10 value 213.342982
## iter 20 value 203.924016
## iter 30 value 199.523842
## iter 40 value 197.894735
## iter 50 value 197.428985
## iter 60 value 197.329694
## final value 197.329370
## converged
## # weights: 51
## initial value 313.973070
## iter 10 value 212.984862
## iter 20 value 200.370483
## iter 30 value 193.905880
```

```
## iter 40 value 189.094677
## iter 50 value 188.029055
## iter 60 value 187.802147
## iter 70 value 187.755799
## iter 80 value 187.737216
## final value 187.737204
## converged
## # weights: 71
## initial value 486.092270
## iter 10 value 211.810963
## iter 20 value 194.088309
## iter 30 value 187.054062
## iter 40 value 185.369238
## iter 50 value 183.770175
## iter 60 value 180.771788
## iter 70 value 179.279301
## iter 80 value 179.008068
## iter 90 value 178.913592
## iter 100 value 178.862813
## final value 178.862813
## stopped after 100 iterations
## # weights: 91
## initial value 351.088463
## iter 10 value 203.151627
## iter 20 value 190.838442
## iter 30 value 180.576228
## iter 40 value 175.694614
## iter 50 value 173.340130
## iter 60 value 172.668493
## iter 70 value 172.110456
## iter 80 value 171.020555
## iter 90 value 170.040303
## iter 100 value 168.345884
## final value 168.345884
## stopped after 100 iterations
## # weights: 11
## initial value 322.799821
## iter 10 value 227.371575
## iter 20 value 226.314513
## iter 30 value 219.124385
## iter 40 value 214.720086
## iter 50 value 214.670822
## final value 214.668428
## converged
## # weights: 31
## initial value 319.232313
## iter 10 value 209.232023
## iter 20 value 199.020740
## iter 30 value 196.388268
## iter 40 value 196.284220
## iter 50 value 196.282416
## final value 196.282332
## converged
## # weights: 51
```

```
## initial value 368.330698
## iter 10 value 204.959909
## iter 20 value 183.896957
## iter 30 value 175.009497
## iter 40 value 171.629865
## iter 50 value 169.058661
## iter 60 value 168.311167
## iter 70 value 168.116516
## iter 80 value 167.908825
## iter 90 value 167.802569
## iter 100 value 167.763823
## final value 167.763823
## stopped after 100 iterations
## # weights: 71
## initial value 382.884119
## iter 10 value 204.062512
## iter 20 value 173.250340
## iter 30 value 158.896040
## iter 40 value 148.922926
## iter 50 value 146.160813
## iter 60 value 145.611499
## iter 70 value 145.486468
## iter 80 value 145.462101
## iter 90 value 145.451639
## iter 100 value 145.450094
## final value 145.450094
## stopped after 100 iterations
## # weights: 91
## initial value 315.277463
## iter 10 value 203.906356
## iter 20 value 170.322177
## iter 30 value 144.193430
## iter 40 value 120.257228
## iter 50 value 111.223113
## iter 60 value 106.999413
## iter 70 value 103.576550
## iter 80 value 100.994458
## iter 90 value 99.487800
## iter 100 value 98.930015
## final value 98.930015
## stopped after 100 iterations
## # weights: 11
## initial value 321.997299
## iter 10 value 228.757113
## iter 20 value 226.412466
## iter 30 value 226.406261
## iter 40 value 224.917321
## iter 50 value 218.762899
## iter 60 value 214.357723
## iter 70 value 214.053417
## iter 80 value 213.957862
## iter 90 value 213.863646
## final value 213.863607
## converged
```

```
## # weights: 31
## initial value 311.494841
## iter 10 value 205.792543
## iter 20 value 192.282630
## iter 30 value 185.960196
## iter 40 value 181.457183
## iter 50 value 180.495264
## iter 60 value 179.946676
## iter 70 value 179.863898
## iter 80 value 179.472503
## iter 90 value 179.421027
## iter 100 value 179.405446
## final value 179.405446
## stopped after 100 iterations
## # weights: 51
## initial value 317.878001
## iter 10 value 207.179992
## iter 20 value 182.583430
## iter 30 value 174.597162
## iter 40 value 166.026561
## iter 50 value 160.809897
## iter 60 value 159.332390
## iter 70 value 159.140894
## iter 80 value 158.945500
## iter 90 value 158.915733
## iter 100 value 158.904854
## final value 158.904854
## stopped after 100 iterations
## # weights: 71
## initial value 382.586191
## iter 10 value 203.881100
## iter 20 value 171.803454
## iter 30 value 157.184794
## iter 40 value 145.822810
## iter 50 value 140.070066
## iter 60 value 139.188465
## iter 70 value 139.047387
## iter 80 value 138.845314
## iter 90 value 138.735076
## iter 100 value 138.702772
## final value 138.702772
## stopped after 100 iterations
## # weights: 91
## initial value 593.437945
## iter 10 value 195.474943
## iter 20 value 164.533478
## iter 30 value 142.379640
## iter 40 value 124.207181
## iter 50 value 114.153828
## iter 60 value 105.687982
## iter 70 value 98.671850
## iter 80 value 95.735192
## iter 90 value 94.561178
## iter 100 value 93.941331
```

```
## final value 93.941331
## stopped after 100 iterations
## # weights: 11
## initial value 321.047648
## iter 10 value 221.621438
## iter 20 value 214.709874
## iter 30 value 213.929968
## iter 40 value 213.762801
## iter 50 value 213.704579
## iter 60 value 213.700672
## iter 70 value 213.694056
## final value 213.693882
## converged
## # weights: 31
## initial value 315.601661
## iter 10 value 210.064579
## iter 20 value 190.368793
## iter 30 value 183.381470
## iter 40 value 177.093841
## iter 50 value 174.024249
## iter 60 value 173.438384
## iter 70 value 173.192546
## iter 80 value 171.965274
## iter 90 value 171.492391
## iter 100 value 170.407999
## final value 170.407999
## stopped after 100 iterations
## # weights: 51
## initial value 349.011882
## iter 10 value 205.898349
## iter 20 value 184.467485
## iter 30 value 173.188604
## iter 40 value 165.027173
## iter 50 value 157.611578
## iter 60 value 155.472092
## iter 70 value 154.615926
## iter 80 value 154.480034
## iter 90 value 154.300222
## iter 100 value 154.226553
## final value 154.226553
## stopped after 100 iterations
## # weights: 71
## initial value 436.139516
## iter 10 value 209.557096
## iter 20 value 175.353749
## iter 30 value 151.875182
## iter 40 value 140.241798
## iter 50 value 131.104296
## iter 60 value 123.158012
## iter 70 value 122.404344
## iter 80 value 122.099760
## iter 90 value 121.693941
## iter 100 value 121.347899
## final value 121.347899
```



```
## stopped after 100 iterations
## # weights:  91
## initial  value 379.180656
## iter   10 value 203.631439
## iter   20 value 168.566892
## iter   30 value 139.985325
## iter   40 value 117.010892
## iter   50 value 104.433977
## iter   60 value 98.579536
## iter   70 value 93.793461
## iter   80 value 92.019189
## iter   90 value 91.286234
## iter  100 value 91.035782
## final  value 91.035782
## stopped after 100 iterations
## # weights:  11
## initial  value 377.752924
## iter   10 value 231.087387
## iter   20 value 224.338090
## iter   30 value 221.143262
## iter   40 value 221.017059
## iter   40 value 221.017059
## iter   40 value 221.017059
## final  value 221.017059
## converged
## # weights:  31
## initial  value 328.453118
## iter   10 value 219.406633
## iter   20 value 208.667996
## iter   30 value 202.080775
## iter   40 value 199.407095
## iter   50 value 194.921829
## iter   60 value 189.774050
## iter   70 value 188.239777
## iter   80 value 187.345194
## iter   90 value 186.747804
## iter  100 value 185.515169
## final  value 185.515169
## stopped after 100 iterations
## # weights:  51
## initial  value 295.946084
## iter   10 value 201.944900
## iter   20 value 172.836515
## iter   30 value 162.730243
## iter   40 value 145.724238
## iter   50 value 139.672626
## iter   60 value 139.087705
## iter   70 value 138.504263
## iter   80 value 138.498769
## final  value 138.498661
## converged
## # weights:  71
## initial  value 321.442925
## iter   10 value 213.408857
```

```
## iter 20 value 189.724793
## iter 30 value 165.410365
## iter 40 value 146.702662
## iter 50 value 135.436390
## iter 60 value 124.034012
## iter 70 value 121.287225
## iter 80 value 121.244345
## iter 90 value 121.128982
## iter 100 value 121.105608
## final value 121.105608
## stopped after 100 iterations
## # weights: 91
## initial value 302.412074
## iter 10 value 208.812850
## iter 20 value 169.470600
## iter 30 value 132.478768
## iter 40 value 116.437887
## iter 50 value 107.672542
## iter 60 value 97.939438
## iter 70 value 90.807965
## iter 80 value 84.446131
## iter 90 value 79.427456
## iter 100 value 78.871414
## final value 78.871414
## stopped after 100 iterations
## # weights: 11
## initial value 362.249302
## iter 10 value 231.273909
## iter 20 value 225.049349
## iter 30 value 224.982873
## final value 224.981040
## converged
## # weights: 31
## initial value 397.546061
## iter 10 value 231.342375
## iter 20 value 214.521481
## iter 30 value 212.744240
## iter 40 value 210.173025
## iter 50 value 209.715244
## iter 60 value 209.682208
## final value 209.681372
## converged
## # weights: 51
## initial value 394.434082
## iter 10 value 217.382864
## iter 20 value 204.702133
## iter 30 value 197.182616
## iter 40 value 194.122823
## iter 50 value 192.065905
## iter 60 value 191.268867
## iter 70 value 190.372468
## iter 80 value 190.251384
## iter 90 value 190.242444
## final value 190.242421
```

```
## converged
## # weights: 71
## initial value 324.132326
## iter 10 value 216.257946
## iter 20 value 203.435314
## iter 30 value 191.366110
## iter 40 value 187.100641
## iter 50 value 185.970704
## iter 60 value 185.186305
## iter 70 value 182.187028
## iter 80 value 181.108130
## iter 90 value 180.951749
## iter 100 value 180.932625
## final value 180.932625
## stopped after 100 iterations
## # weights: 91
## initial value 354.711449
## iter 10 value 218.120644
## iter 20 value 206.800962
## iter 30 value 189.512438
## iter 40 value 183.349446
## iter 50 value 179.763337
## iter 60 value 178.249764
## iter 70 value 177.326735
## iter 80 value 176.292221
## iter 90 value 175.886333
## iter 100 value 175.709433
## final value 175.709433
## stopped after 100 iterations
## # weights: 11
## initial value 345.538697
## iter 10 value 233.241105
## iter 20 value 224.779305
## iter 30 value 221.481542
## iter 40 value 221.379094
## final value 221.378920
## converged
## # weights: 31
## initial value 370.996907
## iter 10 value 218.086133
## iter 20 value 214.085899
## iter 30 value 208.954291
## iter 40 value 206.450554
## iter 50 value 205.840623
## iter 60 value 205.714604
## iter 70 value 205.088485
## iter 80 value 198.087969
## iter 90 value 194.053746
## iter 100 value 193.254713
## final value 193.254713
## stopped after 100 iterations
## # weights: 51
## initial value 395.107829
## iter 10 value 214.752130
```

```
## iter 20 value 194.668822
## iter 30 value 184.715788
## iter 40 value 182.899181
## iter 50 value 182.314478
## iter 60 value 182.113103
## iter 70 value 182.086172
## iter 80 value 182.084039
## iter 90 value 182.079745
## final value 182.079465
## converged
## # weights: 71
## initial value 343.586298
## iter 10 value 228.142508
## iter 20 value 202.414318
## iter 30 value 187.201726
## iter 40 value 181.229187
## iter 50 value 178.448107
## iter 60 value 176.275401
## iter 70 value 175.608172
## iter 80 value 173.982480
## iter 90 value 173.838392
## iter 100 value 173.753037
## final value 173.753037
## stopped after 100 iterations
## # weights: 91
## initial value 303.690232
## iter 10 value 205.432690
## iter 20 value 166.260112
## iter 30 value 145.650392
## iter 40 value 140.478075
## iter 50 value 138.626169
## iter 60 value 136.190273
## iter 70 value 133.714437
## iter 80 value 132.920638
## iter 90 value 131.418304
## iter 100 value 131.215945
## final value 131.215945
## stopped after 100 iterations
## # weights: 11
## initial value 312.294085
## iter 10 value 230.649055
## iter 20 value 226.118676
## iter 30 value 221.387722
## iter 40 value 221.054179
## final value 221.054145
## converged
## # weights: 31
## initial value 483.564192
## iter 10 value 218.124567
## iter 20 value 200.699639
## iter 30 value 197.736040
## iter 40 value 195.150510
## iter 50 value 192.936794
## iter 60 value 192.641249
```

```
## iter 70 value 192.556858
## iter 80 value 191.831689
## iter 90 value 190.889017
## iter 100 value 190.550240
## final value 190.550240
## stopped after 100 iterations
## # weights: 51
## initial value 448.748981
## iter 10 value 217.713524
## iter 20 value 196.219861
## iter 30 value 188.708677
## iter 40 value 182.692584
## iter 50 value 178.547225
## iter 60 value 176.558072
## iter 70 value 175.522460
## iter 80 value 174.394598
## iter 90 value 173.409144
## iter 100 value 172.696819
## final value 172.696819
## stopped after 100 iterations
## # weights: 71
## initial value 316.549907
## iter 10 value 208.770007
## iter 20 value 180.205927
## iter 30 value 164.777152
## iter 40 value 155.397225
## iter 50 value 151.723925
## iter 60 value 150.646904
## iter 70 value 150.066360
## iter 80 value 149.609671
## iter 90 value 149.430937
## iter 100 value 149.356489
## final value 149.356489
## stopped after 100 iterations
## # weights: 91
## initial value 424.402891
## iter 10 value 221.264438
## iter 20 value 198.112320
## iter 30 value 159.303106
## iter 40 value 132.870637
## iter 50 value 115.834958
## iter 60 value 109.051752
## iter 70 value 107.191751
## iter 80 value 106.204960
## iter 90 value 105.770310
## iter 100 value 105.471666
## final value 105.471666
## stopped after 100 iterations
## # weights: 11
## initial value 315.876096
## iter 10 value 222.477437
## iter 20 value 221.025965
## final value 221.020780
## converged
```

```
## # weights: 31
## initial value 446.865199
## iter 10 value 220.189140
## iter 20 value 207.301814
## iter 30 value 200.291200
## iter 40 value 198.874480
## iter 50 value 194.785701
## iter 60 value 193.830509
## iter 70 value 193.288309
## iter 80 value 192.473275
## iter 90 value 191.297240
## iter 100 value 190.257620
## final value 190.257620
## stopped after 100 iterations
## # weights: 51
## initial value 361.926080
## iter 10 value 217.302450
## iter 20 value 191.845190
## iter 30 value 177.416957
## iter 40 value 171.010122
## iter 50 value 165.090978
## iter 60 value 161.199446
## iter 70 value 158.812043
## iter 80 value 158.159146
## iter 90 value 156.710210
## iter 100 value 155.206706
## final value 155.206706
## stopped after 100 iterations
## # weights: 71
## initial value 405.042480
## iter 10 value 203.319422
## iter 20 value 179.929735
## iter 30 value 156.276053
## iter 40 value 145.325227
## iter 50 value 138.078111
## iter 60 value 133.627550
## iter 70 value 131.591381
## iter 80 value 130.507575
## iter 90 value 129.578386
## iter 100 value 129.298068
## final value 129.298068
## stopped after 100 iterations
## # weights: 91
## initial value 365.164066
## iter 10 value 213.200993
## iter 20 value 179.712283
## iter 30 value 151.026539
## iter 40 value 135.622256
## iter 50 value 131.422513
## iter 60 value 124.092040
## iter 70 value 121.790629
## iter 80 value 121.171821
## iter 90 value 120.861396
## iter 100 value 120.365474
```

```
## final value 120.365474
## stopped after 100 iterations
## # weights: 11
## initial value 361.676677
## iter 10 value 227.839914
## iter 20 value 226.039115
## iter 30 value 223.634234
## iter 40 value 219.380968
## iter 50 value 218.627502
## final value 218.627464
## converged
## # weights: 31
## initial value 339.349900
## iter 10 value 217.608606
## iter 20 value 206.088226
## iter 30 value 198.717927
## iter 40 value 192.295898
## iter 50 value 188.658958
## iter 60 value 188.226502
## final value 188.224416
## converged
## # weights: 51
## initial value 373.364118
## iter 10 value 208.688845
## iter 20 value 193.320447
## iter 30 value 180.637714
## iter 40 value 177.569165
## iter 50 value 174.375599
## iter 60 value 169.946907
## iter 70 value 160.914015
## iter 80 value 154.078224
## iter 90 value 150.774827
## iter 100 value 150.168093
## final value 150.168093
## stopped after 100 iterations
## # weights: 71
## initial value 350.042802
## iter 10 value 215.451125
## iter 20 value 187.339170
## iter 30 value 162.941464
## iter 40 value 148.119723
## iter 50 value 143.527298
## iter 60 value 137.643863
## iter 70 value 131.002976
## iter 80 value 126.300860
## iter 90 value 123.508731
## iter 100 value 121.787138
## final value 121.787138
## stopped after 100 iterations
## # weights: 91
## initial value 315.186867
## iter 10 value 206.226098
## iter 20 value 166.295018
## iter 30 value 135.680938
```

```
## iter 40 value 119.538453
## iter 50 value 111.258336
## iter 60 value 104.782590
## iter 70 value 94.320665
## iter 80 value 92.443858
## iter 90 value 92.073134
## iter 100 value 91.799800
## final value 91.799800
## stopped after 100 iterations
## # weights: 11
## initial value 347.398666
## iter 10 value 238.095959
## iter 20 value 222.979216
## final value 222.720531
## converged
## # weights: 31
## initial value 328.267785
## iter 10 value 229.838137
## iter 20 value 220.626539
## iter 30 value 212.296849
## iter 40 value 208.584422
## iter 50 value 208.212661
## iter 60 value 208.195423
## final value 208.195401
## converged
## # weights: 51
## initial value 427.664641
## iter 10 value 225.862234
## iter 20 value 211.109008
## iter 30 value 208.051143
## iter 40 value 203.201415
## iter 50 value 198.123863
## iter 60 value 195.200597
## iter 70 value 189.728156
## iter 80 value 187.825288
## iter 90 value 187.321091
## iter 100 value 187.315426
## final value 187.315426
## stopped after 100 iterations
## # weights: 71
## initial value 355.529035
## iter 10 value 216.048773
## iter 20 value 198.633836
## iter 30 value 192.875837
## iter 40 value 185.744880
## iter 50 value 182.760254
## iter 60 value 181.673833
## iter 70 value 180.114187
## iter 80 value 178.692081
## iter 90 value 178.483257
## iter 100 value 178.377665
## final value 178.377665
## stopped after 100 iterations
## # weights: 91
```



```
## initial value 315.938260
## iter 10 value 214.022548
## iter 20 value 195.552830
## iter 30 value 183.578962
## iter 40 value 176.315186
## iter 50 value 174.300030
## iter 60 value 173.244466
## iter 70 value 172.627781
## iter 80 value 172.484765
## iter 90 value 172.338445
## iter 100 value 172.223807
## final value 172.223807
## stopped after 100 iterations
## # weights: 11
## initial value 362.911403
## iter 10 value 231.103120
## iter 20 value 225.943578
## iter 30 value 221.622128
## iter 40 value 219.001705
## final value 218.992409
## converged
## # weights: 31
## initial value 307.004769
## iter 10 value 226.155636
## iter 20 value 218.243923
## iter 30 value 209.389033
## iter 40 value 206.663403
## iter 50 value 205.482323
## iter 60 value 204.934748
## iter 70 value 204.847516
## iter 80 value 203.342659
## iter 90 value 202.610560
## iter 100 value 201.991748
## final value 201.991748
## stopped after 100 iterations
## # weights: 51
## initial value 340.378584
## iter 10 value 218.213947
## iter 20 value 198.782233
## iter 30 value 186.784009
## iter 40 value 182.602135
## iter 50 value 180.379566
## iter 60 value 176.080502
## iter 70 value 174.736901
## iter 80 value 174.291157
## iter 90 value 174.087195
## iter 100 value 170.780631
## final value 170.780631
## stopped after 100 iterations
## # weights: 71
## initial value 313.213436
## iter 10 value 211.642591
## iter 20 value 182.520234
## iter 30 value 171.578076
```

```
## iter 40 value 167.840247
## iter 50 value 166.794808
## iter 60 value 166.535756
## iter 70 value 166.319443
## iter 80 value 165.933884
## iter 90 value 165.488286
## iter 100 value 165.126614
## final value 165.126614
## stopped after 100 iterations
## # weights: 91
## initial value 449.128712
## iter 10 value 212.670965
## iter 20 value 186.630295
## iter 30 value 143.381156
## iter 40 value 135.072201
## iter 50 value 131.489463
## iter 60 value 128.180354
## iter 70 value 126.654041
## iter 80 value 124.399938
## iter 90 value 122.728315
## iter 100 value 122.060695
## final value 122.060695
## stopped after 100 iterations
## # weights: 11
## initial value 364.264580
## iter 10 value 231.771044
## iter 20 value 225.984435
## iter 30 value 224.936624
## iter 40 value 219.412510
## iter 50 value 218.669690
## iter 60 value 218.664711
## iter 60 value 218.664711
## iter 60 value 218.664711
## final value 218.664711
## converged
## # weights: 31
## initial value 331.754727
## iter 10 value 212.413138
## iter 20 value 198.144371
## iter 30 value 193.129548
## iter 40 value 186.305754
## iter 50 value 185.721927
## iter 60 value 185.402396
## iter 70 value 185.152805
## iter 80 value 184.563268
## iter 90 value 184.455977
## iter 100 value 184.428805
## final value 184.428805
## stopped after 100 iterations
## # weights: 51
## initial value 333.828094
## iter 10 value 210.242460
## iter 20 value 190.729238
## iter 30 value 182.806667
```

```
## iter 40 value 178.517244
## iter 50 value 175.175223
## iter 60 value 173.443655
## iter 70 value 171.983216
## iter 80 value 169.396634
## iter 90 value 169.012789
## iter 100 value 168.451373
## final value 168.451373
## stopped after 100 iterations
## # weights: 71
## initial value 521.645244
## iter 10 value 211.252645
## iter 20 value 182.759722
## iter 30 value 165.072572
## iter 40 value 158.635077
## iter 50 value 155.246018
## iter 60 value 153.961134
## iter 70 value 153.252160
## iter 80 value 152.625006
## iter 90 value 152.457412
## iter 100 value 152.114409
## final value 152.114409
## stopped after 100 iterations
## # weights: 91
## initial value 319.855857
## iter 10 value 215.290636
## iter 20 value 196.312434
## iter 30 value 156.013039
## iter 40 value 136.431341
## iter 50 value 129.203625
## iter 60 value 124.530163
## iter 70 value 122.664154
## iter 80 value 121.883427
## iter 90 value 121.106377
## iter 100 value 120.762624
## final value 120.762624
## stopped after 100 iterations
## # weights: 11
## initial value 314.143791
## iter 10 value 231.836293
## iter 20 value 229.294024
## final value 229.293887
## converged
## # weights: 31
## initial value 387.916212
## iter 10 value 211.300018
## iter 20 value 205.561593
## iter 30 value 199.606884
## iter 40 value 194.913573
## iter 50 value 188.892108
## iter 60 value 187.963049
## iter 70 value 187.737193
## iter 80 value 187.507287
## iter 90 value 186.821634
```

```
## iter 100 value 186.349832
## final value 186.349832
## stopped after 100 iterations
## # weights: 51
## initial value 431.665641
## iter 10 value 213.597137
## iter 20 value 184.498812
## iter 30 value 168.573746
## iter 40 value 163.138631
## iter 50 value 159.471171
## iter 60 value 154.958962
## iter 70 value 151.592791
## iter 80 value 150.083582
## iter 90 value 149.772439
## iter 100 value 149.007076
## final value 149.007076
## stopped after 100 iterations
## # weights: 71
## initial value 343.559779
## iter 10 value 211.022805
## iter 20 value 181.475077
## iter 30 value 165.544413
## iter 40 value 151.354923
## iter 50 value 141.037844
## iter 60 value 138.281772
## iter 70 value 137.095316
## iter 80 value 136.931314
## iter 90 value 136.824353
## iter 100 value 136.728653
## final value 136.728653
## stopped after 100 iterations
## # weights: 91
## initial value 357.161759
## iter 10 value 207.717436
## iter 20 value 158.703693
## iter 30 value 130.521818
## iter 40 value 110.371056
## iter 50 value 98.905483
## iter 60 value 95.503977
## iter 70 value 93.395784
## iter 80 value 92.598579
## iter 90 value 92.306831
## iter 100 value 92.162970
## final value 92.162970
## stopped after 100 iterations
## # weights: 11
## initial value 383.107126
## iter 10 value 217.762563
## iter 20 value 210.047105
## iter 30 value 208.222320
## iter 40 value 208.020205
## iter 40 value 208.020203
## iter 40 value 208.020203
## final value 208.020203
```

```
## converged
## # weights: 31
## initial value 384.234419
## iter 10 value 206.847077
## iter 20 value 192.144315
## iter 30 value 187.538325
## iter 40 value 181.297639
## iter 50 value 178.396468
## iter 60 value 175.292467
## iter 70 value 175.041054
## iter 80 value 174.435368
## iter 90 value 173.171241
## iter 100 value 173.098963
## final value 173.098963
## stopped after 100 iterations
## # weights: 51
## initial value 485.781962
## iter 10 value 196.649736
## iter 20 value 179.981438
## iter 30 value 162.891700
## iter 40 value 151.465250
## iter 50 value 142.132665
## iter 60 value 133.632424
## iter 70 value 130.934392
## iter 80 value 130.775812
## iter 90 value 130.770728
## final value 130.770722
## converged
## # weights: 71
## initial value 333.307822
## iter 10 value 192.718583
## iter 20 value 175.057087
## iter 30 value 148.960107
## iter 40 value 136.002932
## iter 50 value 131.325330
## iter 60 value 125.740439
## iter 70 value 116.763424
## iter 80 value 114.909828
## iter 90 value 114.636095
## iter 100 value 114.624544
## final value 114.624544
## stopped after 100 iterations
## # weights: 91
## initial value 338.478080
## iter 10 value 199.443373
## iter 20 value 167.609666
## iter 30 value 145.986430
## iter 40 value 122.192611
## iter 50 value 109.582769
## iter 60 value 93.423012
## iter 70 value 88.767872
## iter 80 value 88.411482
## iter 90 value 88.398813
## final value 88.398584
```

```
## converged
## # weights: 11
## initial value 334.437965
## iter 10 value 238.799072
## iter 20 value 216.533571
## iter 30 value 213.045076
## iter 40 value 211.740529
## final value 211.740505
## converged
## # weights: 31
## initial value 345.238179
## iter 10 value 217.966033
## iter 20 value 203.585776
## iter 30 value 202.022122
## iter 40 value 201.529847
## iter 50 value 201.515694
## final value 201.515503
## converged
## # weights: 51
## initial value 329.382008
## iter 10 value 224.000422
## iter 20 value 203.667542
## iter 30 value 187.638544
## iter 40 value 177.828320
## iter 50 value 177.294946
## iter 60 value 177.121563
## iter 70 value 176.314538
## iter 80 value 175.933824
## iter 90 value 175.720843
## iter 100 value 175.662469
## final value 175.662469
## stopped after 100 iterations
## # weights: 71
## initial value 338.075521
## iter 10 value 205.594129
## iter 20 value 190.160286
## iter 30 value 176.693048
## iter 40 value 172.258521
## iter 50 value 169.953096
## iter 60 value 169.125723
## iter 70 value 168.462529
## iter 80 value 168.266018
## iter 90 value 167.991037
## iter 100 value 167.967158
## final value 167.967158
## stopped after 100 iterations
## # weights: 91
## initial value 329.753438
## iter 10 value 203.656194
## iter 20 value 185.566193
## iter 30 value 174.361564
## iter 40 value 166.084895
## iter 50 value 160.856218
## iter 60 value 159.472974
```

```
## iter 70 value 159.017147
## iter 80 value 158.872647
## iter 90 value 158.826350
## iter 100 value 158.810702
## final value 158.810702
## stopped after 100 iterations
## # weights: 11
## initial value 331.497791
## iter 10 value 212.740491
## iter 20 value 208.676475
## iter 30 value 208.583466
## final value 208.582665
## converged
## # weights: 31
## initial value 315.284136
## iter 10 value 209.947737
## iter 20 value 205.061242
## iter 30 value 203.565036
## iter 40 value 203.189406
## iter 50 value 198.680038
## iter 60 value 193.351288
## iter 70 value 192.583319
## iter 80 value 191.280552
## iter 90 value 190.137138
## iter 100 value 187.066489
## final value 187.066489
## stopped after 100 iterations
## # weights: 51
## initial value 361.439428
## iter 10 value 210.406297
## iter 20 value 190.154820
## iter 30 value 170.814871
## iter 40 value 166.788907
## iter 50 value 166.110244
## iter 60 value 165.792776
## iter 70 value 165.757561
## iter 80 value 165.754414
## iter 90 value 165.753881
## final value 165.753870
## converged
## # weights: 71
## initial value 342.955689
## iter 10 value 199.304823
## iter 20 value 166.153108
## iter 30 value 152.335002
## iter 40 value 145.850262
## iter 50 value 141.549679
## iter 60 value 140.011297
## iter 70 value 138.757386
## iter 80 value 138.462797
## iter 90 value 138.409062
## iter 100 value 138.393668
## final value 138.393668
## stopped after 100 iterations
```

```
## # weights:  91
## initial  value 328.750207
## iter   10 value 196.581284
## iter   20 value 162.791633
## iter   30 value 136.968362
## iter   40 value 123.470939
## iter   50 value 120.182373
## iter   60 value 118.680445
## iter   70 value 118.015638
## iter   80 value 117.813407
## iter   90 value 117.423059
## iter  100 value 117.225056
## final   value 117.225056
## stopped after 100 iterations
## # weights:  11
## initial  value 326.260903
## iter   10 value 216.484667
## iter   20 value 209.409830
## iter   30 value 208.083192
## iter   40 value 208.065096
## iter   40 value 208.065096
## iter   40 value 208.065096
## final   value 208.065096
## converged
## # weights:  31
## initial  value 341.386529
## iter   10 value 222.390552
## iter   20 value 195.082890
## iter   30 value 190.817791
## iter   40 value 188.656941
## iter   50 value 188.468004
## iter   60 value 188.196289
## iter   70 value 188.116390
## iter   80 value 188.084587
## iter   90 value 188.063077
## iter  100 value 188.057746
## final   value 188.057746
## stopped after 100 iterations
## # weights:  51
## initial  value 320.940311
## iter   10 value 205.463482
## iter   20 value 183.610845
## iter   30 value 171.244901
## iter   40 value 166.040523
## iter   50 value 164.459867
## iter   60 value 163.515274
## iter   70 value 161.802875
## iter   80 value 158.912962
## iter   90 value 156.071776
## iter  100 value 154.434616
## final   value 154.434616
## stopped after 100 iterations
## # weights:  71
## initial  value 358.712454
```



```
## iter 10 value 201.402033
## iter 20 value 165.497791
## iter 30 value 145.581914
## iter 40 value 138.666140
## iter 50 value 135.039813
## iter 60 value 129.036236
## iter 70 value 126.055091
## iter 80 value 125.546824
## iter 90 value 125.212503
## iter 100 value 124.906350
## final value 124.906350
## stopped after 100 iterations
## # weights: 91
## initial value 351.018549
## iter 10 value 197.451349
## iter 20 value 166.757707
## iter 30 value 130.710348
## iter 40 value 112.754349
## iter 50 value 106.394886
## iter 60 value 104.474717
## iter 70 value 103.948808
## iter 80 value 103.108187
## iter 90 value 101.727865
## iter 100 value 99.989541
## final value 99.989541
## stopped after 100 iterations
## # weights: 11
## initial value 359.320467
## iter 10 value 219.635607
## iter 20 value 214.837280
## iter 30 value 209.408687
## iter 40 value 208.025025
## final value 208.024707
## converged
## # weights: 31
## initial value 309.631334
## iter 10 value 204.084056
## iter 20 value 192.815416
## iter 30 value 187.113062
## iter 40 value 179.918882
## iter 50 value 178.266079
## iter 60 value 178.052482
## iter 70 value 177.866381
## iter 80 value 177.703940
## iter 90 value 177.137760
## iter 100 value 176.629798
## final value 176.629798
## stopped after 100 iterations
## # weights: 51
## initial value 340.935166
## iter 10 value 202.747465
## iter 20 value 186.658905
## iter 30 value 170.806681
## iter 40 value 168.186636
```

```
## iter 50 value 161.290408
## iter 60 value 156.599115
## iter 70 value 154.211817
## iter 80 value 151.518758
## iter 90 value 150.875173
## iter 100 value 150.811767
## final value 150.811767
## stopped after 100 iterations
## # weights: 71
## initial value 338.618756
## iter 10 value 209.936388
## iter 20 value 177.445687
## iter 30 value 145.744699
## iter 40 value 134.862448
## iter 50 value 128.289276
## iter 60 value 122.625776
## iter 70 value 119.490659
## iter 80 value 116.042309
## iter 90 value 112.650896
## iter 100 value 110.785197
## final value 110.785197
## stopped after 100 iterations
## # weights: 91
## initial value 397.083392
## iter 10 value 198.640398
## iter 20 value 157.868585
## iter 30 value 137.980230
## iter 40 value 126.054777
## iter 50 value 116.527888
## iter 60 value 114.223288
## iter 70 value 113.706305
## iter 80 value 113.526346
## iter 90 value 113.449326
## iter 100 value 113.392319
## final value 113.392319
## stopped after 100 iterations
## # weights: 11
## initial value 316.735522
## iter 10 value 240.952066
## iter 20 value 227.290326
## iter 30 value 221.423728
## iter 40 value 218.492279
## iter 50 value 218.316736
## iter 60 value 218.290043
## final value 218.287019
## converged
## # weights: 31
## initial value 334.200848
## iter 10 value 218.117266
## iter 20 value 203.195528
## iter 30 value 200.644048
## iter 40 value 198.483273
## iter 50 value 196.338684
## iter 60 value 196.115036
```

```
## iter 70 value 196.102994
## iter 80 value 196.097649
## iter 90 value 196.057874
## iter 100 value 195.124473
## final value 195.124473
## stopped after 100 iterations
## # weights: 51
## initial value 365.187999
## iter 10 value 208.266184
## iter 20 value 190.497636
## iter 30 value 177.597384
## iter 40 value 172.294395
## iter 50 value 157.798059
## iter 60 value 153.537511
## iter 70 value 153.515528
## iter 80 value 153.515395
## iter 80 value 153.515394
## iter 80 value 153.515394
## final value 153.515394
## converged
## # weights: 71
## initial value 323.230287
## iter 10 value 207.429272
## iter 20 value 182.109630
## iter 30 value 165.798604
## iter 40 value 149.911011
## iter 50 value 141.736761
## iter 60 value 135.733887
## iter 70 value 132.972943
## iter 80 value 131.798727
## iter 90 value 127.861287
## iter 100 value 123.286831
## final value 123.286831
## stopped after 100 iterations
## # weights: 91
## initial value 442.054374
## iter 10 value 204.748455
## iter 20 value 173.749783
## iter 30 value 152.055238
## iter 40 value 139.373984
## iter 50 value 131.671502
## iter 60 value 116.020848
## iter 70 value 104.741302
## iter 80 value 98.003108
## iter 90 value 93.079685
## iter 100 value 90.315013
## final value 90.315013
## stopped after 100 iterations
## # weights: 11
## initial value 305.806273
## iter 10 value 233.349337
## iter 20 value 222.940632
## iter 30 value 222.441390
## final value 222.431425
```

```
## converged
## # weights: 31
## initial value 333.183165
## iter 10 value 222.137399
## iter 20 value 215.177586
## iter 30 value 211.707864
## iter 40 value 209.798031
## iter 50 value 209.224184
## iter 60 value 209.184106
## final value 209.183729
## converged
## # weights: 51
## initial value 368.213624
## iter 10 value 220.586763
## iter 20 value 203.509650
## iter 30 value 198.382785
## iter 40 value 196.277798
## iter 50 value 194.511475
## iter 60 value 193.031190
## iter 70 value 192.674910
## iter 80 value 191.878790
## iter 90 value 191.328819
## iter 100 value 191.309345
## final value 191.309345
## stopped after 100 iterations
## # weights: 71
## initial value 373.979108
## iter 10 value 216.237995
## iter 20 value 202.789142
## iter 30 value 194.179899
## iter 40 value 189.486285
## iter 50 value 184.590943
## iter 60 value 181.026667
## iter 70 value 179.043365
## iter 80 value 178.170314
## iter 90 value 177.633193
## iter 100 value 177.512765
## final value 177.512765
## stopped after 100 iterations
## # weights: 91
## initial value 294.186242
## iter 10 value 215.264282
## iter 20 value 200.252469
## iter 30 value 192.124666
## iter 40 value 183.309541
## iter 50 value 176.181432
## iter 60 value 171.041459
## iter 70 value 170.376183
## iter 80 value 170.152365
## iter 90 value 170.034402
## iter 100 value 169.983109
## final value 169.983109
## stopped after 100 iterations
## # weights: 11
```

```
## initial value 335.566693
## iter 10 value 230.545280
## iter 20 value 220.710481
## iter 30 value 219.049148
## iter 40 value 218.898104
## final value 218.898100
## converged
## # weights: 31
## initial value 420.055586
## iter 10 value 215.362677
## iter 20 value 204.035667
## iter 30 value 201.256631
## iter 40 value 200.779063
## iter 50 value 200.607185
## iter 60 value 200.598860
## final value 200.598189
## converged
## # weights: 51
## initial value 329.659781
## iter 10 value 212.626204
## iter 20 value 190.213996
## iter 30 value 181.709585
## iter 40 value 179.217944
## iter 50 value 177.473350
## iter 60 value 170.724415
## iter 70 value 167.856150
## iter 80 value 167.281335
## iter 90 value 166.929120
## iter 100 value 166.689371
## final value 166.689371
## stopped after 100 iterations
## # weights: 71
## initial value 318.075928
## iter 10 value 210.179793
## iter 20 value 196.090030
## iter 30 value 177.121335
## iter 40 value 169.216299
## iter 50 value 160.658060
## iter 60 value 157.111873
## iter 70 value 156.012780
## iter 80 value 155.106299
## iter 90 value 154.784814
## iter 100 value 154.412689
## final value 154.412689
## stopped after 100 iterations
## # weights: 91
## initial value 430.468537
## iter 10 value 209.856418
## iter 20 value 185.448266
## iter 30 value 164.759992
## iter 40 value 150.350101
## iter 50 value 142.177131
## iter 60 value 139.923942
## iter 70 value 138.531869
```

```
## iter 80 value 137.615663
## iter 90 value 136.741004
## iter 100 value 136.352415
## final value 136.352415
## stopped after 100 iterations
## # weights: 11
## initial value 408.522248
## iter 10 value 223.576340
## iter 20 value 218.864378
## iter 30 value 218.485022
## iter 40 value 218.381508
## final value 218.381443
## converged
## # weights: 31
## initial value 428.733509
## iter 10 value 205.824249
## iter 20 value 199.558878
## iter 30 value 195.646308
## iter 40 value 193.181529
## iter 50 value 192.395949
## iter 60 value 191.910962
## iter 70 value 191.875061
## iter 80 value 191.867358
## final value 191.862160
## converged
## # weights: 51
## initial value 314.909327
## iter 10 value 209.729849
## iter 20 value 187.543003
## iter 30 value 177.754365
## iter 40 value 169.508708
## iter 50 value 165.247928
## iter 60 value 163.639851
## iter 70 value 162.706094
## iter 80 value 162.144083
## iter 90 value 161.937320
## iter 100 value 161.302799
## final value 161.302799
## stopped after 100 iterations
## # weights: 71
## initial value 323.727100
## iter 10 value 206.051015
## iter 20 value 184.494714
## iter 30 value 165.831975
## iter 40 value 150.141937
## iter 50 value 144.772499
## iter 60 value 141.024128
## iter 70 value 139.644687
## iter 80 value 139.079634
## iter 90 value 138.906876
## iter 100 value 138.704944
## final value 138.704944
## stopped after 100 iterations
## # weights: 91
```

```
## initial value 414.693493
## iter 10 value 209.273757
## iter 20 value 188.031004
## iter 30 value 168.621929
## iter 40 value 142.381405
## iter 50 value 123.079184
## iter 60 value 116.604633
## iter 70 value 109.784802
## iter 80 value 105.172992
## iter 90 value 103.049750
## iter 100 value 100.364126
## final value 100.364126
## stopped after 100 iterations
## # weights: 11
## initial value 336.533633
## iter 10 value 235.917787
## iter 20 value 230.704151
## iter 30 value 230.150345
## iter 40 value 226.079886
## iter 50 value 220.209198
## iter 60 value 218.444437
## iter 70 value 218.312730
## final value 218.294460
## converged
## # weights: 31
## initial value 334.776752
## iter 10 value 213.526244
## iter 20 value 207.756728
## iter 30 value 203.369649
## iter 40 value 201.681709
## iter 50 value 200.498632
## iter 60 value 199.184577
## iter 70 value 198.261848
## iter 80 value 198.112933
## iter 90 value 197.913498
## iter 100 value 197.253844
## final value 197.253844
## stopped after 100 iterations
## # weights: 51
## initial value 326.427390
## iter 10 value 216.553208
## iter 20 value 194.392779
## iter 30 value 179.371904
## iter 40 value 173.098011
## iter 50 value 167.093386
## iter 60 value 162.866814
## iter 70 value 162.136239
## iter 80 value 161.696428
## iter 90 value 161.621015
## iter 100 value 161.379158
## final value 161.379158
## stopped after 100 iterations
## # weights: 71
## initial value 328.968545
```

```
## iter 10 value 212.369466
## iter 20 value 183.586635
## iter 30 value 165.381852
## iter 40 value 156.033370
## iter 50 value 148.083982
## iter 60 value 140.298318
## iter 70 value 128.843622
## iter 80 value 123.355673
## iter 90 value 122.581682
## iter 100 value 122.355339
## final value 122.355339
## stopped after 100 iterations
## # weights: 91
## initial value 318.158048
## iter 10 value 209.796903
## iter 20 value 172.205291
## iter 30 value 141.862224
## iter 40 value 122.059982
## iter 50 value 112.008094
## iter 60 value 105.652058
## iter 70 value 100.214776
## iter 80 value 95.546310
## iter 90 value 94.452709
## iter 100 value 93.967030
## final value 93.967030
## stopped after 100 iterations
## # weights: 11
## initial value 321.189231
## iter 10 value 226.613376
## iter 20 value 224.725409
## iter 30 value 221.796801
## iter 40 value 219.400671
## iter 50 value 219.124387
## final value 219.063758
## converged
## # weights: 31
## initial value 330.920445
## iter 10 value 212.235941
## iter 20 value 200.757973
## iter 30 value 195.241329
## iter 40 value 187.355690
## iter 50 value 180.966236
## iter 60 value 177.713003
## iter 70 value 177.634628
## iter 80 value 177.631129
## final value 177.630084
## converged
## # weights: 51
## initial value 309.197154
## iter 10 value 208.052138
## iter 20 value 192.586296
## iter 30 value 174.103373
## iter 40 value 168.845389
## iter 50 value 166.091655
```



```
## iter 60 value 153.178352
## iter 70 value 152.201531
## iter 80 value 151.917409
## iter 90 value 151.799116
## iter 100 value 150.708492
## final value 150.708492
## stopped after 100 iterations
## # weights: 71
## initial value 311.183060
## iter 10 value 206.099182
## iter 20 value 179.073205
## iter 30 value 155.340034
## iter 40 value 139.617648
## iter 50 value 126.640771
## iter 60 value 124.237341
## iter 70 value 123.850194
## iter 80 value 123.654799
## iter 90 value 123.493136
## iter 100 value 123.466969
## final value 123.466969
## stopped after 100 iterations
## # weights: 91
## initial value 350.740374
## iter 10 value 206.656683
## iter 20 value 168.559376
## iter 30 value 148.592639
## iter 40 value 133.284843
## iter 50 value 126.355931
## iter 60 value 116.115420
## iter 70 value 106.512072
## iter 80 value 97.458922
## iter 90 value 93.602249
## iter 100 value 93.031318
## final value 93.031318
## stopped after 100 iterations
## # weights: 11
## initial value 374.615242
## iter 10 value 232.647756
## iter 20 value 225.377418
## iter 30 value 223.052203
## iter 40 value 222.366039
## final value 222.366034
## converged
## # weights: 31
## initial value 354.799061
## iter 10 value 231.567466
## iter 20 value 218.015978
## iter 30 value 212.581214
## iter 40 value 210.805969
## iter 50 value 208.867280
## iter 60 value 207.468300
## iter 70 value 207.297166
## iter 80 value 207.248744
## final value 207.246965
```

```
## converged
## # weights:  51
## initial  value 318.141696
## iter   10 value 226.774009
## iter   20 value 208.223439
## iter   30 value 201.826447
## iter   40 value 195.585560
## iter   50 value 193.244936
## iter   60 value 191.789986
## iter   70 value 191.071015
## iter   80 value 190.651562
## iter   90 value 190.644560
## final   value 190.644347
## converged
## # weights:  71
## initial  value 311.459643
## iter   10 value 211.308665
## iter   20 value 196.431955
## iter   30 value 184.313262
## iter   40 value 180.387429
## iter   50 value 179.131131
## iter   60 value 177.911743
## iter   70 value 177.664389
## iter   80 value 177.598960
## iter   90 value 177.585319
## iter  100 value 177.584059
## final   value 177.584059
## stopped after 100 iterations
## # weights:  91
## initial  value 477.895081
## iter   10 value 211.385028
## iter   20 value 194.728232
## iter   30 value 180.284413
## iter   40 value 172.423486
## iter   50 value 169.615236
## iter   60 value 168.408558
## iter   70 value 167.791046
## iter   80 value 166.908400
## iter   90 value 166.378644
## iter  100 value 166.046217
## final   value 166.046217
## stopped after 100 iterations
## # weights:  11
## initial  value 371.729442
## iter   10 value 229.675395
## iter   20 value 222.900464
## iter   30 value 219.715271
## iter   40 value 219.450723
## iter   40 value 219.450722
## iter   40 value 219.450722
## final   value 219.450722
## converged
## # weights:  31
## initial  value 331.676277
```

```
## iter 10 value 227.461952
## iter 20 value 217.259908
## iter 30 value 212.363991
## iter 40 value 211.681895
## iter 50 value 211.611079
## iter 60 value 211.607480
## final value 211.607469
## converged
## # weights: 51
## initial value 360.890588
## iter 10 value 216.031591
## iter 20 value 195.864779
## iter 30 value 180.412816
## iter 40 value 174.483166
## iter 50 value 171.624893
## iter 60 value 171.052763
## iter 70 value 170.935643
## iter 80 value 170.614079
## iter 90 value 170.512772
## iter 100 value 170.509073
## final value 170.509073
## stopped after 100 iterations
## # weights: 71
## initial value 362.937717
## iter 10 value 216.908919
## iter 20 value 186.465753
## iter 30 value 171.433272
## iter 40 value 168.480459
## iter 50 value 167.508331
## iter 60 value 160.385573
## iter 70 value 158.447910
## iter 80 value 158.112416
## iter 90 value 157.991951
## iter 100 value 157.891123
## final value 157.891123
## stopped after 100 iterations
## # weights: 91
## initial value 449.113437
## iter 10 value 217.372947
## iter 20 value 195.280205
## iter 30 value 169.576035
## iter 40 value 149.959479
## iter 50 value 139.602161
## iter 60 value 133.484082
## iter 70 value 130.831110
## iter 80 value 129.527662
## iter 90 value 129.045474
## iter 100 value 128.902797
## final value 128.902797
## stopped after 100 iterations
## # weights: 11
## initial value 318.030423
## iter 10 value 229.158314
## iter 20 value 225.372000
```

```
## iter 30 value 224.825381
## iter 40 value 224.116929
## final value 224.114902
## converged
## # weights: 31
## initial value 316.748913
## iter 10 value 228.281625
## iter 20 value 206.268498
## iter 30 value 202.533829
## iter 40 value 199.384700
## iter 50 value 194.570530
## iter 60 value 193.520733
## iter 70 value 193.375102
## iter 80 value 193.299155
## iter 90 value 192.677763
## iter 100 value 190.493461
## final value 190.493461
## stopped after 100 iterations
## # weights: 51
## initial value 566.374558
## iter 10 value 208.582566
## iter 20 value 179.426086
## iter 30 value 170.189676
## iter 40 value 163.385039
## iter 50 value 162.094687
## iter 60 value 159.786632
## iter 70 value 158.926486
## iter 80 value 158.593509
## iter 90 value 158.334767
## iter 100 value 158.311743
## final value 158.311743
## stopped after 100 iterations
## # weights: 71
## initial value 390.405165
## iter 10 value 208.688660
## iter 20 value 173.855476
## iter 30 value 160.749890
## iter 40 value 154.612735
## iter 50 value 150.658597
## iter 60 value 146.837159
## iter 70 value 144.051600
## iter 80 value 143.198534
## iter 90 value 142.775081
## iter 100 value 141.829307
## final value 141.829307
## stopped after 100 iterations
## # weights: 91
## initial value 477.363684
## iter 10 value 213.458549
## iter 20 value 174.534246
## iter 30 value 155.281271
## iter 40 value 137.997547
## iter 50 value 126.843680
## iter 60 value 123.586262
```

```
## iter 70 value 121.740403
## iter 80 value 121.158650
## iter 90 value 119.941846
## iter 100 value 119.544972
## final value 119.544972
## stopped after 100 iterations
## # weights: 11
## initial value 326.361566
## iter 10 value 226.756280
## iter 20 value 219.278772
## iter 30 value 219.078375
## final value 219.069141
## converged
## # weights: 31
## initial value 330.334617
## iter 10 value 213.589531
## iter 20 value 193.168716
## iter 30 value 191.930554
## iter 40 value 190.838201
## iter 50 value 185.530430
## iter 60 value 180.077793
## iter 70 value 178.730281
## iter 80 value 178.595919
## iter 90 value 178.450312
## iter 100 value 178.315023
## final value 178.315023
## stopped after 100 iterations
## # weights: 51
## initial value 320.748579
## iter 10 value 214.890285
## iter 20 value 188.563009
## iter 30 value 175.290883
## iter 40 value 168.115294
## iter 50 value 155.847387
## iter 60 value 153.595591
## iter 70 value 153.245614
## iter 80 value 152.685809
## iter 90 value 152.576484
## iter 100 value 152.461504
## final value 152.461504
## stopped after 100 iterations
## # weights: 71
## initial value 305.317211
## iter 10 value 206.330618
## iter 20 value 177.528814
## iter 30 value 157.451426
## iter 40 value 143.204769
## iter 50 value 132.970040
## iter 60 value 129.699074
## iter 70 value 128.569439
## iter 80 value 127.778766
## iter 90 value 127.467168
## iter 100 value 127.143616
## final value 127.143616
```

```
## stopped after 100 iterations
## # weights:  91
## initial  value 324.598916
## iter   10 value 207.937389
## iter   20 value 180.454637
## iter   30 value 149.003295
## iter   40 value 130.563563
## iter   50 value 110.995218
## iter   60 value 103.958990
## iter   70 value 100.931888
## iter   80 value 99.849997
## iter   90 value 98.832608
## iter  100 value 98.554021
## final  value 98.554021
## stopped after 100 iterations
## # weights:  11
## initial  value 344.507370
## iter   10 value 225.505664
## iter   20 value 222.779647
## iter   30 value 222.732454
## final  value 222.730708
## converged
## # weights:  31
## initial  value 337.243938
## iter   10 value 225.601056
## iter   20 value 214.452906
## iter   30 value 203.005020
## iter   40 value 196.998410
## iter   50 value 189.333042
## iter   60 value 185.862305
## iter   70 value 183.640471
## iter   80 value 183.026587
## iter   90 value 182.930796
## iter  100 value 182.806803
## final  value 182.806803
## stopped after 100 iterations
## # weights:  51
## initial  value 390.234924
## iter   10 value 221.456525
## iter   20 value 202.899045
## iter   30 value 192.500632
## iter   40 value 184.189178
## iter   50 value 176.966520
## iter   60 value 172.331989
## iter   70 value 163.410815
## iter   80 value 162.400545
## iter   90 value 162.356909
## final  value 162.356166
## converged
## # weights:  71
## initial  value 310.919700
## iter   10 value 213.004985
## iter   20 value 172.790939
## iter   30 value 157.624478
```

```
## iter 40 value 145.835971
## iter 50 value 139.007783
## iter 60 value 129.282909
## iter 70 value 128.330430
## iter 80 value 128.239982
## final value 128.239933
## converged
## # weights: 91
## initial value 480.606449
## iter 10 value 221.308474
## iter 20 value 178.577921
## iter 30 value 146.315566
## iter 40 value 118.872894
## iter 50 value 100.954810
## iter 60 value 91.666132
## iter 70 value 84.967603
## iter 80 value 79.712237
## iter 90 value 70.243090
## iter 100 value 64.850633
## final value 64.850633
## stopped after 100 iterations
## # weights: 11
## initial value 322.485446
## iter 10 value 229.217595
## iter 20 value 226.273473
## iter 30 value 226.261110
## final value 226.260727
## converged
## # weights: 31
## initial value 315.783692
## iter 10 value 232.153835
## iter 20 value 215.842263
## iter 30 value 209.175866
## iter 40 value 206.748589
## iter 50 value 206.458649
## iter 60 value 206.452177
## final value 206.452127
## converged
## # weights: 51
## initial value 328.620594
## iter 10 value 222.197299
## iter 20 value 204.312098
## iter 30 value 197.367975
## iter 40 value 196.115527
## iter 50 value 195.812740
## iter 60 value 195.655993
## iter 70 value 195.530457
## iter 80 value 195.527011
## final value 195.526974
## converged
## # weights: 71
## initial value 345.075278
## iter 10 value 221.319744
## iter 20 value 198.343956
```

```
## iter 30 value 187.834161
## iter 40 value 185.633978
## iter 50 value 184.789301
## iter 60 value 183.124695
## iter 70 value 181.585700
## iter 80 value 181.143038
## iter 90 value 179.585909
## iter 100 value 178.886605
## final value 178.886605
## stopped after 100 iterations
## # weights: 91
## initial value 391.679705
## iter 10 value 218.628811
## iter 20 value 198.848597
## iter 30 value 186.385010
## iter 40 value 178.281686
## iter 50 value 176.118970
## iter 60 value 173.731164
## iter 70 value 171.105634
## iter 80 value 166.480710
## iter 90 value 164.414314
## iter 100 value 163.757645
## final value 163.757645
## stopped after 100 iterations
## # weights: 11
## initial value 312.823060
## iter 10 value 235.791380
## iter 20 value 228.892730
## iter 30 value 223.557300
## iter 40 value 223.179500
## iter 50 value 223.168168
## iter 50 value 223.168167
## iter 50 value 223.168167
## final value 223.168167
## converged
## # weights: 31
## initial value 363.756752
## iter 10 value 227.377618
## iter 20 value 208.286875
## iter 30 value 202.220846
## iter 40 value 200.478492
## iter 50 value 198.811922
## iter 60 value 197.550187
## iter 70 value 196.352538
## iter 80 value 195.998433
## iter 90 value 195.822489
## iter 100 value 195.808553
## final value 195.808553
## stopped after 100 iterations
## # weights: 51
## initial value 385.658564
## iter 10 value 213.454346
## iter 20 value 193.191749
## iter 30 value 188.727139
```



```
## iter 40 value 187.586819
## iter 50 value 186.765407
## iter 60 value 186.028625
## iter 70 value 184.765904
## iter 80 value 183.642327
## iter 90 value 183.219416
## iter 100 value 182.451610
## final value 182.451610
## stopped after 100 iterations
## # weights: 71
## initial value 321.455698
## iter 10 value 213.120766
## iter 20 value 200.029783
## iter 30 value 185.337751
## iter 40 value 165.574555
## iter 50 value 159.257959
## iter 60 value 156.759152
## iter 70 value 154.721299
## iter 80 value 153.610417
## iter 90 value 152.421096
## iter 100 value 151.933705
## final value 151.933705
## stopped after 100 iterations
## # weights: 91
## initial value 322.934271
## iter 10 value 210.423492
## iter 20 value 167.446733
## iter 30 value 144.264775
## iter 40 value 130.330001
## iter 50 value 122.397979
## iter 60 value 117.588934
## iter 70 value 115.448597
## iter 80 value 113.806251
## iter 90 value 113.208155
## iter 100 value 112.759721
## final value 112.759721
## stopped after 100 iterations
## # weights: 11
## initial value 338.380716
## iter 10 value 243.105539
## iter 20 value 240.193023
## iter 30 value 236.501599
## iter 40 value 233.849927
## iter 50 value 231.703347
## iter 60 value 230.729955
## iter 70 value 230.703563
## final value 230.697626
## converged
## # weights: 31
## initial value 360.119368
## iter 10 value 213.048478
## iter 20 value 201.305202
## iter 30 value 196.917131
## iter 40 value 194.673102
```

```
## iter 50 value 194.335210
## iter 60 value 194.178128
## iter 70 value 194.150009
## iter 80 value 194.081200
## iter 90 value 194.053151
## final value 194.047682
## converged
## # weights: 51
## initial value 321.309089
## iter 10 value 227.152186
## iter 20 value 197.204340
## iter 30 value 184.694756
## iter 40 value 174.773698
## iter 50 value 163.576594
## iter 60 value 159.694782
## iter 70 value 158.756099
## iter 80 value 156.911681
## iter 90 value 154.723129
## iter 100 value 154.424367
## final value 154.424367
## stopped after 100 iterations
## # weights: 71
## initial value 359.950168
## iter 10 value 215.530338
## iter 20 value 179.339835
## iter 30 value 154.915546
## iter 40 value 143.636738
## iter 50 value 139.384027
## iter 60 value 137.221628
## iter 70 value 134.453639
## iter 80 value 133.793196
## iter 90 value 133.427216
## iter 100 value 133.339672
## final value 133.339672
## stopped after 100 iterations
## # weights: 91
## initial value 413.760386
## iter 10 value 216.378861
## iter 20 value 187.986849
## iter 30 value 168.179616
## iter 40 value 150.889559
## iter 50 value 133.411991
## iter 60 value 124.097558
## iter 70 value 118.715575
## iter 80 value 116.316464
## iter 90 value 114.402021
## iter 100 value 112.694010
## final value 112.694010
## stopped after 100 iterations
## # weights: 11
## initial value 317.378445
## iter 10 value 235.435426
## iter 20 value 230.408947
## iter 30 value 223.616909
```

```
## iter 40 value 222.739954
## final value 222.735313
## converged
## # weights: 31
## initial value 313.266835
## iter 10 value 210.268859
## iter 20 value 200.089245
## iter 30 value 198.300650
## iter 40 value 197.080568
## iter 50 value 195.019805
## iter 60 value 191.924404
## iter 70 value 191.545088
## iter 80 value 191.399267
## iter 90 value 190.595658
## iter 100 value 189.620330
## final value 189.620330
## stopped after 100 iterations
## # weights: 51
## initial value 353.436123
## iter 10 value 212.349524
## iter 20 value 204.398630
## iter 30 value 190.942680
## iter 40 value 175.942441
## iter 50 value 170.837802
## iter 60 value 165.273224
## iter 70 value 157.145688
## iter 80 value 150.573980
## iter 90 value 149.170154
## iter 100 value 148.913132
## final value 148.913132
## stopped after 100 iterations
## # weights: 71
## initial value 354.046090
## iter 10 value 210.859495
## iter 20 value 166.443748
## iter 30 value 140.569890
## iter 40 value 127.584743
## iter 50 value 123.087049
## iter 60 value 116.771163
## iter 70 value 113.454999
## iter 80 value 108.840543
## iter 90 value 104.723941
## iter 100 value 103.976691
## final value 103.976691
## stopped after 100 iterations
## # weights: 91
## initial value 556.013687
## iter 10 value 201.404716
## iter 20 value 160.799654
## iter 30 value 139.296830
## iter 40 value 122.587925
## iter 50 value 107.753822
## iter 60 value 103.772002
## iter 70 value 96.426298
```

```
## iter 80 value 94.629128
## iter 90 value 94.195586
## iter 100 value 93.857021
## final value 93.857021
## stopped after 100 iterations
## # weights: 11
## initial value 306.178129
## iter 10 value 230.764171
## iter 20 value 217.521088
## iter 30 value 215.604653
## iter 40 value 215.372290
## final value 215.372252
## converged
## # weights: 31
## initial value 336.334136
## iter 10 value 215.423251
## iter 20 value 201.560512
## iter 30 value 191.200856
## iter 40 value 188.894104
## iter 50 value 185.673461
## iter 60 value 183.506649
## iter 70 value 180.320629
## iter 80 value 179.334225
## iter 90 value 179.088229
## iter 100 value 179.072706
## final value 179.072706
## stopped after 100 iterations
## # weights: 51
## initial value 324.683708
## iter 10 value 210.711967
## iter 20 value 191.278164
## iter 30 value 179.273743
## iter 40 value 170.743666
## iter 50 value 155.961569
## iter 60 value 145.050667
## iter 70 value 140.539416
## iter 80 value 140.421221
## iter 90 value 140.379804
## iter 100 value 140.315110
## final value 140.315110
## stopped after 100 iterations
## # weights: 71
## initial value 327.741949
## iter 10 value 202.122744
## iter 20 value 169.594301
## iter 30 value 145.838036
## iter 40 value 132.909589
## iter 50 value 128.617487
## iter 60 value 121.816365
## iter 70 value 111.382845
## iter 80 value 108.717167
## iter 90 value 106.714220
## iter 100 value 106.050833
## final value 106.050833
```

```
## stopped after 100 iterations
## # weights:  91
## initial  value 368.862317
## iter   10 value 207.129114
## iter   20 value 171.166713
## iter   30 value 139.041037
## iter   40 value 123.055780
## iter   50 value 110.064994
## iter   60 value 100.042863
## iter   70 value 93.824869
## iter   80 value 91.024578
## iter   90 value 88.835873
## iter  100 value 87.041644
## final  value 87.041644
## stopped after 100 iterations
## # weights:  11
## initial  value 342.094662
## iter   10 value 237.478714
## iter   20 value 222.565352
## iter   30 value 219.159965
## final  value 218.908207
## converged
## # weights:  31
## initial  value 298.904762
## iter   10 value 217.477307
## iter   20 value 203.277790
## iter   30 value 197.854532
## iter   40 value 196.400665
## iter   50 value 195.982588
## iter   60 value 195.825190
## iter   70 value 195.822041
## iter   80 value 195.821888
## final  value 195.821855
## converged
## # weights:  51
## initial  value 497.913831
## iter   10 value 224.409641
## iter   20 value 199.399368
## iter   30 value 195.885913
## iter   40 value 193.005688
## iter   50 value 190.524195
## iter   60 value 188.336914
## iter   70 value 187.588747
## iter   80 value 187.437755
## iter   90 value 187.434459
## final  value 187.434441
## converged
## # weights:  71
## initial  value 307.321273
## iter   10 value 214.032330
## iter   20 value 195.312419
## iter   30 value 184.534979
## iter   40 value 181.206433
## iter   50 value 179.686683
```

```
## iter 60 value 179.344314
## iter 70 value 178.604783
## iter 80 value 177.863424
## iter 90 value 177.831717
## iter 100 value 177.828467
## final value 177.828467
## stopped after 100 iterations
## # weights: 91
## initial value 456.194229
## iter 10 value 213.421237
## iter 20 value 191.158458
## iter 30 value 177.494323
## iter 40 value 171.959738
## iter 50 value 167.116449
## iter 60 value 163.328060
## iter 70 value 162.415848
## iter 80 value 161.907838
## iter 90 value 161.515605
## iter 100 value 161.265174
## final value 161.265174
## stopped after 100 iterations
## # weights: 11
## initial value 361.022963
## iter 10 value 234.315988
## iter 20 value 233.518753
## iter 30 value 229.047853
## iter 40 value 219.730769
## iter 50 value 216.247129
## iter 60 value 215.789642
## final value 215.789632
## converged
## # weights: 31
## initial value 310.591791
## iter 10 value 206.005079
## iter 20 value 190.685412
## iter 30 value 189.417754
## iter 40 value 188.963333
## iter 50 value 188.857342
## iter 60 value 188.818890
## iter 70 value 188.818132
## iter 70 value 188.818131
## iter 70 value 188.818131
## final value 188.818131
## converged
## # weights: 51
## initial value 347.260166
## iter 10 value 200.352205
## iter 20 value 179.642734
## iter 30 value 173.397231
## iter 40 value 169.801203
## iter 50 value 168.979060
## iter 60 value 168.725209
## iter 70 value 168.607368
## iter 80 value 168.345694
```

```
## iter 90 value 168.334932
## iter 100 value 168.326245
## final value 168.326245
## stopped after 100 iterations
## # weights: 71
## initial value 391.778128
## iter 10 value 202.270378
## iter 20 value 175.917297
## iter 30 value 162.136976
## iter 40 value 152.486256
## iter 50 value 147.065450
## iter 60 value 144.716573
## iter 70 value 143.591151
## iter 80 value 143.218484
## iter 90 value 143.042225
## iter 100 value 143.008620
## final value 143.008620
## stopped after 100 iterations
## # weights: 91
## initial value 500.531607
## iter 10 value 210.203352
## iter 20 value 172.180192
## iter 30 value 149.622543
## iter 40 value 137.268630
## iter 50 value 127.391263
## iter 60 value 123.739354
## iter 70 value 120.121027
## iter 80 value 117.723209
## iter 90 value 114.665372
## iter 100 value 112.032246
## final value 112.032246
## stopped after 100 iterations
## # weights: 11
## initial value 335.478922
## iter 10 value 228.793107
## iter 20 value 226.809955
## iter 30 value 222.392779
## iter 40 value 216.200987
## iter 50 value 215.421900
## iter 60 value 215.415366
## final value 215.415361
## converged
## # weights: 31
## initial value 350.941474
## iter 10 value 215.723255
## iter 20 value 210.933925
## iter 30 value 202.491389
## iter 40 value 195.668510
## iter 50 value 193.393852
## iter 60 value 192.122280
## iter 70 value 191.943919
## iter 80 value 191.869789
## iter 90 value 191.453729
## iter 100 value 191.448837
```

```
## final value 191.448837
## stopped after 100 iterations
## # weights: 51
## initial value 388.348820
## iter 10 value 208.517034
## iter 20 value 180.305636
## iter 30 value 171.701534
## iter 40 value 163.858001
## iter 50 value 158.900799
## iter 60 value 154.257455
## iter 70 value 151.797270
## iter 80 value 150.194291
## iter 90 value 149.149590
## iter 100 value 149.046884
## final value 149.046884
## stopped after 100 iterations
## # weights: 71
## initial value 330.826755
## iter 10 value 212.932584
## iter 20 value 190.834014
## iter 30 value 174.495575
## iter 40 value 163.557137
## iter 50 value 158.791841
## iter 60 value 155.405817
## iter 70 value 151.930833
## iter 80 value 149.760609
## iter 90 value 148.368790
## iter 100 value 147.044046
## final value 147.044046
## stopped after 100 iterations
## # weights: 91
## initial value 318.475839
## iter 10 value 205.303625
## iter 20 value 159.150797
## iter 30 value 126.635418
## iter 40 value 116.422858
## iter 50 value 111.331457
## iter 60 value 109.240690
## iter 70 value 107.864534
## iter 80 value 107.528681
## iter 90 value 107.286325
## iter 100 value 106.763785
## final value 106.763785
## stopped after 100 iterations
## # weights: 11
## initial value 360.780355
## iter 10 value 229.709981
## iter 20 value 226.535600
## iter 30 value 223.218414
## iter 40 value 216.229919
## iter 50 value 215.394493
## iter 60 value 215.376581
## final value 215.376578
## converged
```



```
## # weights: 31
## initial value 431.188496
## iter 10 value 202.422161
## iter 20 value 193.681709
## iter 30 value 191.726030
## iter 40 value 188.286184
## iter 50 value 187.004316
## iter 60 value 186.460658
## iter 70 value 186.429861
## iter 80 value 186.402477
## iter 90 value 185.996611
## iter 100 value 185.594494
## final value 185.594494
## stopped after 100 iterations
## # weights: 51
## initial value 331.609815
## iter 10 value 205.422788
## iter 20 value 184.547412
## iter 30 value 170.310884
## iter 40 value 162.163552
## iter 50 value 153.823906
## iter 60 value 153.283153
## iter 70 value 152.928106
## iter 80 value 152.640459
## iter 90 value 152.402094
## iter 100 value 152.285951
## final value 152.285951
## stopped after 100 iterations
## # weights: 71
## initial value 369.527089
## iter 10 value 207.481972
## iter 20 value 180.715366
## iter 30 value 162.941766
## iter 40 value 156.495554
## iter 50 value 153.192537
## iter 60 value 145.933469
## iter 70 value 138.635706
## iter 80 value 132.904222
## iter 90 value 130.247270
## iter 100 value 129.354706
## final value 129.354706
## stopped after 100 iterations
## # weights: 91
## initial value 417.677718
## iter 10 value 204.346218
## iter 20 value 163.023539
## iter 30 value 128.898669
## iter 40 value 113.180413
## iter 50 value 105.580330
## iter 60 value 102.736286
## iter 70 value 98.376889
## iter 80 value 95.555002
## iter 90 value 94.085726
## iter 100 value 93.193549
```

```
## final value 93.193549
## stopped after 100 iterations
## # weights: 11
## initial value 348.925064
## iter 10 value 232.692702
## iter 20 value 227.885976
## iter 30 value 222.292345
## iter 40 value 217.714381
## iter 50 value 217.493030
## iter 60 value 217.492581
## iter 60 value 217.492581
## iter 60 value 217.492581
## final value 217.492581
## converged
## # weights: 31
## initial value 405.252410
## iter 10 value 210.173038
## iter 20 value 197.134152
## iter 30 value 194.041092
## iter 40 value 186.703844
## iter 50 value 178.007799
## iter 60 value 176.872304
## iter 70 value 176.211408
## iter 80 value 175.091585
## iter 90 value 174.673790
## iter 100 value 173.738501
## final value 173.738501
## stopped after 100 iterations
## # weights: 51
## initial value 540.048840
## iter 10 value 238.354452
## iter 20 value 222.827562
## iter 30 value 215.827223
## iter 40 value 210.091192
## iter 50 value 205.539571
## iter 60 value 197.938135
## iter 70 value 192.775340
## iter 80 value 187.974354
## iter 90 value 184.143520
## iter 100 value 180.799327
## final value 180.799327
## stopped after 100 iterations
## # weights: 71
## initial value 432.491794
## iter 10 value 217.275777
## iter 20 value 182.725220
## iter 30 value 169.051717
## iter 40 value 152.814874
## iter 50 value 136.363945
## iter 60 value 126.740146
## iter 70 value 125.456961
## iter 80 value 124.996805
## iter 90 value 124.973745
## final value 124.973502
```

```
## converged
## # weights:  91
## initial  value 293.707057
## iter   10 value 206.821207
## iter   20 value 182.643851
## iter   30 value 158.788388
## iter   40 value 128.458327
## iter   50 value 113.415232
## iter   60 value 104.928644
## iter   70 value 96.737004
## iter   80 value 92.333737
## iter   90 value 90.883650
## iter  100 value 90.772506
## final   value 90.772506
## stopped after 100 iterations
## # weights:  11
## initial  value 329.089042
## iter   10 value 237.001624
## iter   20 value 223.882647
## iter   30 value 220.963816
## final   value 220.864372
## converged
## # weights:  31
## initial  value 359.315513
## iter   10 value 223.343259
## iter   20 value 208.868754
## iter   30 value 203.919566
## iter   40 value 203.215513
## iter   50 value 203.193244
## final   value 203.193154
## converged
## # weights:  51
## initial  value 321.787000
## iter   10 value 217.750075
## iter   20 value 202.226639
## iter   30 value 199.641904
## iter   40 value 196.401569
## iter   50 value 193.761299
## iter   60 value 193.210890
## iter   70 value 191.957429
## iter   80 value 190.768205
## iter   90 value 190.038212
## iter  100 value 190.024079
## final   value 190.024079
## stopped after 100 iterations
## # weights:  71
## initial  value 448.978163
## iter   10 value 213.351495
## iter   20 value 196.213286
## iter   30 value 186.310652
## iter   40 value 182.363949
## iter   50 value 180.388397
## iter   60 value 179.776098
## iter   70 value 179.396197
```

```
## iter 80 value 179.269582
## iter 90 value 179.237748
## iter 100 value 178.775887
## final value 178.775887
## stopped after 100 iterations
## # weights: 91
## initial value 385.079509
## iter 10 value 209.443643
## iter 20 value 192.431191
## iter 30 value 184.171593
## iter 40 value 180.181765
## iter 50 value 177.530400
## iter 60 value 172.598534
## iter 70 value 168.429149
## iter 80 value 167.558507
## iter 90 value 166.754854
## iter 100 value 166.256077
## final value 166.256077
## stopped after 100 iterations
## # weights: 11
## initial value 338.428289
## iter 10 value 223.430076
## iter 20 value 218.018961
## iter 30 value 217.875975
## iter 40 value 217.874876
## iter 40 value 217.874876
## iter 40 value 217.874876
## final value 217.874876
## converged
## # weights: 31
## initial value 313.343403
## iter 10 value 210.145990
## iter 20 value 202.125373
## iter 30 value 197.937731
## iter 40 value 196.543934
## iter 50 value 196.219116
## iter 60 value 196.037239
## iter 70 value 196.015754
## final value 196.014607
## converged
## # weights: 51
## initial value 340.843290
## iter 10 value 207.196250
## iter 20 value 190.022671
## iter 30 value 181.900189
## iter 40 value 176.936357
## iter 50 value 175.700983
## iter 60 value 175.523125
## iter 70 value 174.839314
## iter 80 value 174.786869
## iter 90 value 174.784669
## final value 174.784651
## converged
## # weights: 71
```

```
## initial value 335.636647
## iter 10 value 202.979234
## iter 20 value 176.885487
## iter 30 value 159.861811
## iter 40 value 154.400729
## iter 50 value 153.773558
## iter 60 value 153.475306
## iter 70 value 153.136024
## iter 80 value 152.324411
## iter 90 value 152.134656
## iter 100 value 152.035598
## final value 152.035598
## stopped after 100 iterations
## # weights: 91
## initial value 306.692379
## iter 10 value 205.290409
## iter 20 value 181.896557
## iter 30 value 164.320294
## iter 40 value 159.236196
## iter 50 value 153.436573
## iter 60 value 145.054383
## iter 70 value 139.622259
## iter 80 value 138.127691
## iter 90 value 136.446451
## iter 100 value 134.903857
## final value 134.903857
## stopped after 100 iterations
## # weights: 11
## initial value 332.428264
## iter 10 value 224.855092
## iter 20 value 218.669575
## iter 30 value 217.757459
## iter 40 value 217.539548
## final value 217.531624
## converged
## # weights: 31
## initial value 332.239618
## iter 10 value 210.583605
## iter 20 value 200.132712
## iter 30 value 197.635548
## iter 40 value 192.366506
## iter 50 value 189.286336
## iter 60 value 188.194550
## iter 70 value 188.090411
## iter 80 value 188.074795
## iter 90 value 188.067904
## iter 100 value 188.047743
## final value 188.047743
## stopped after 100 iterations
## # weights: 51
## initial value 300.502610
## iter 10 value 205.719426
## iter 20 value 185.165604
## iter 30 value 177.628516
```

```
## iter 40 value 172.672163
## iter 50 value 170.377157
## iter 60 value 170.198463
## iter 70 value 169.491194
## iter 80 value 169.357468
## iter 90 value 169.030114
## iter 100 value 168.850959
## final value 168.850959
## stopped after 100 iterations
## # weights: 71
## initial value 341.795894
## iter 10 value 206.191608
## iter 20 value 185.476574
## iter 30 value 172.419893
## iter 40 value 162.924473
## iter 50 value 157.658969
## iter 60 value 152.762656
## iter 70 value 151.093636
## iter 80 value 150.469233
## iter 90 value 150.035467
## iter 100 value 149.949811
## final value 149.949811
## stopped after 100 iterations
## # weights: 91
## initial value 304.950366
## iter 10 value 206.683727
## iter 20 value 172.248399
## iter 30 value 146.570202
## iter 40 value 119.665466
## iter 50 value 110.238543
## iter 60 value 108.283743
## iter 70 value 106.583529
## iter 80 value 105.201137
## iter 90 value 103.997096
## iter 100 value 103.514235
## final value 103.514235
## stopped after 100 iterations
## # weights: 11
## initial value 363.183082
## iter 10 value 273.029668
## iter 20 value 221.819936
## iter 30 value 218.268739
## iter 40 value 217.498660
## final value 217.496494
## converged
## # weights: 31
## initial value 342.856297
## iter 10 value 211.419591
## iter 20 value 206.668659
## iter 30 value 198.280467
## iter 40 value 191.627066
## iter 50 value 190.155776
## iter 60 value 189.390451
## iter 70 value 187.522498
```

```
## iter 80 value 185.696897
## iter 90 value 180.438821
## iter 100 value 178.662186
## final value 178.662186
## stopped after 100 iterations
## # weights: 51
## initial value 417.537930
## iter 10 value 205.500103
## iter 20 value 187.297396
## iter 30 value 181.982698
## iter 40 value 164.124644
## iter 50 value 155.730123
## iter 60 value 153.084726
## iter 70 value 152.873247
## iter 80 value 152.703003
## iter 90 value 152.457162
## iter 100 value 151.771575
## final value 151.771575
## stopped after 100 iterations
## # weights: 71
## initial value 426.891657
## iter 10 value 206.162044
## iter 20 value 182.596444
## iter 30 value 166.794597
## iter 40 value 156.296240
## iter 50 value 150.689598
## iter 60 value 142.352523
## iter 70 value 139.310899
## iter 80 value 138.438003
## iter 90 value 138.075899
## iter 100 value 137.692768
## final value 137.692768
## stopped after 100 iterations
## # weights: 91
## initial value 333.610377
## iter 10 value 206.227778
## iter 20 value 173.098463
## iter 30 value 152.858571
## iter 40 value 128.012518
## iter 50 value 114.171741
## iter 60 value 105.683182
## iter 70 value 101.735427
## iter 80 value 98.803310
## iter 90 value 98.417025
## iter 100 value 98.204800
## final value 98.204800
## stopped after 100 iterations
## # weights: 11
## initial value 406.564315
## iter 10 value 227.189192
## iter 20 value 219.732671
## iter 30 value 218.658490
## final value 218.642564
## converged
```

```
## # weights: 31
## initial value 371.706944
## iter 10 value 212.082469
## iter 20 value 200.957454
## iter 30 value 196.354426
## iter 40 value 192.630046
## iter 50 value 190.555724
## iter 60 value 189.742031
## iter 70 value 189.644215
## iter 80 value 189.555495
## iter 90 value 189.530547
## iter 100 value 189.525569
## final value 189.525569
## stopped after 100 iterations
## # weights: 51
## initial value 319.678717
## iter 10 value 209.326451
## iter 20 value 183.339545
## iter 30 value 177.766424
## iter 40 value 172.716494
## iter 50 value 165.881969
## iter 60 value 163.952336
## iter 70 value 160.209985
## iter 80 value 149.311674
## iter 90 value 143.129636
## iter 100 value 142.196262
## final value 142.196262
## stopped after 100 iterations
## # weights: 71
## initial value 400.835388
## iter 10 value 209.385619
## iter 20 value 181.851387
## iter 30 value 157.282543
## iter 40 value 146.705196
## iter 50 value 133.864341
## iter 60 value 122.065360
## iter 70 value 115.830737
## iter 80 value 115.487960
## iter 90 value 115.466126
## iter 100 value 115.465452
## final value 115.465452
## stopped after 100 iterations
## # weights: 91
## initial value 284.103762
## iter 10 value 206.230452
## iter 20 value 175.728964
## iter 30 value 136.301922
## iter 40 value 106.655084
## iter 50 value 94.486387
## iter 60 value 88.390423
## iter 70 value 84.342177
## iter 80 value 77.806358
## iter 90 value 71.826817
## iter 100 value 69.879161
```



```
## final value 69.879161
## stopped after 100 iterations
## # weights: 11
## initial value 321.709697
## iter 10 value 239.017396
## iter 20 value 223.457574
## iter 30 value 222.135513
## final value 222.109630
## converged
## # weights: 31
## initial value 352.321439
## iter 10 value 223.816265
## iter 20 value 210.643930
## iter 30 value 208.499790
## iter 40 value 207.917562
## iter 50 value 207.900337
## final value 207.900332
## converged
## # weights: 51
## initial value 440.151275
## iter 10 value 224.596336
## iter 20 value 204.881746
## iter 30 value 193.793452
## iter 40 value 191.379755
## iter 50 value 191.060092
## iter 60 value 191.021663
## iter 70 value 191.006092
## final value 191.005988
## converged
## # weights: 71
## initial value 319.412742
## iter 10 value 216.251818
## iter 20 value 200.447935
## iter 30 value 193.405771
## iter 40 value 188.275089
## iter 50 value 185.555931
## iter 60 value 183.592181
## iter 70 value 183.037850
## iter 80 value 182.887131
## iter 90 value 182.862524
## iter 100 value 182.860644
## final value 182.860644
## stopped after 100 iterations
## # weights: 91
## initial value 336.547908
## iter 10 value 215.611532
## iter 20 value 198.271454
## iter 30 value 186.715999
## iter 40 value 179.907999
## iter 50 value 173.730317
## iter 60 value 171.824049
## iter 70 value 171.279127
## iter 80 value 171.067167
## iter 90 value 170.798258
```

```
## iter 100 value 170.259745
## final value 170.259745
## stopped after 100 iterations
## # weights: 11
## initial value 353.576109
## iter 10 value 228.995808
## iter 20 value 220.438734
## iter 30 value 219.210172
## iter 40 value 219.178537
## final value 219.178534
## converged
## # weights: 31
## initial value 326.541945
## iter 10 value 227.852229
## iter 20 value 213.986863
## iter 30 value 210.276636
## iter 40 value 207.322039
## iter 50 value 200.748542
## iter 60 value 199.289805
## iter 70 value 197.394998
## iter 80 value 197.254090
## iter 90 value 197.243622
## final value 197.243393
## converged
## # weights: 51
## initial value 387.168072
## iter 10 value 213.827897
## iter 20 value 195.234570
## iter 30 value 181.142608
## iter 40 value 177.979273
## iter 50 value 176.781379
## iter 60 value 176.182319
## iter 70 value 175.521021
## iter 80 value 175.400341
## iter 90 value 175.066119
## iter 100 value 172.964815
## final value 172.964815
## stopped after 100 iterations
## # weights: 71
## initial value 369.978037
## iter 10 value 208.813553
## iter 20 value 183.950613
## iter 30 value 177.125537
## iter 40 value 170.097867
## iter 50 value 166.785964
## iter 60 value 165.603065
## iter 70 value 164.239745
## iter 80 value 163.899642
## iter 90 value 163.798019
## final value 163.771980
## converged
## # weights: 91
## initial value 369.277739
## iter 10 value 206.515238
```

```
## iter 20 value 173.427244
## iter 30 value 153.317091
## iter 40 value 141.805332
## iter 50 value 135.762847
## iter 60 value 128.982611
## iter 70 value 124.779480
## iter 80 value 123.159137
## iter 90 value 121.549825
## iter 100 value 119.546838
## final value 119.546838
## stopped after 100 iterations
## # weights: 11
## initial value 314.921099
## iter 10 value 230.289428
## iter 20 value 221.460433
## iter 30 value 219.211478
## iter 40 value 218.684551
## final value 218.684486
## converged
## # weights: 31
## initial value 377.072635
## iter 10 value 209.868616
## iter 20 value 197.386923
## iter 30 value 192.612959
## iter 40 value 188.161545
## iter 50 value 188.061287
## iter 60 value 188.050508
## iter 70 value 188.043650
## iter 80 value 188.037937
## iter 90 value 188.021055
## iter 100 value 188.020777
## final value 188.020777
## stopped after 100 iterations
## # weights: 51
## initial value 450.092809
## iter 10 value 212.608950
## iter 20 value 192.882565
## iter 30 value 181.224608
## iter 40 value 177.774337
## iter 50 value 173.773663
## iter 60 value 170.106310
## iter 70 value 168.974201
## iter 80 value 168.408326
## iter 90 value 167.445037
## iter 100 value 164.820150
## final value 164.820150
## stopped after 100 iterations
## # weights: 71
## initial value 322.296608
## iter 10 value 213.724570
## iter 20 value 185.439250
## iter 30 value 165.156066
## iter 40 value 143.706579
## iter 50 value 139.702014
```

```
## iter 60 value 137.347999
## iter 70 value 135.602617
## iter 80 value 134.620288
## iter 90 value 132.941645
## iter 100 value 130.291143
## final value 130.291143
## stopped after 100 iterations
## # weights: 91
## initial value 307.091377
## iter 10 value 208.816819
## iter 20 value 172.293120
## iter 30 value 146.351740
## iter 40 value 131.604215
## iter 50 value 120.239570
## iter 60 value 116.648530
## iter 70 value 113.979813
## iter 80 value 112.049327
## iter 90 value 111.279764
## iter 100 value 111.021069
## final value 111.021069
## stopped after 100 iterations
## # weights: 11
## initial value 313.575902
## iter 10 value 233.481435
## iter 20 value 220.163279
## iter 30 value 218.727586
## final value 218.646770
## converged
## # weights: 31
## initial value 322.150423
## iter 10 value 209.336452
## iter 20 value 201.458705
## iter 30 value 196.931014
## iter 40 value 195.211945
## iter 50 value 189.862965
## iter 60 value 186.803584
## iter 70 value 185.595186
## iter 80 value 185.053643
## iter 90 value 183.813521
## iter 100 value 183.534474
## final value 183.534474
## stopped after 100 iterations
## # weights: 51
## initial value 331.509792
## iter 10 value 206.242959
## iter 20 value 188.841227
## iter 30 value 177.520537
## iter 40 value 168.161828
## iter 50 value 163.365246
## iter 60 value 157.434811
## iter 70 value 156.606713
## iter 80 value 156.334116
## iter 90 value 156.181814
## iter 100 value 155.912035
```

```
## final value 155.912035
## stopped after 100 iterations
## # weights: 71
## initial value 320.272732
## iter 10 value 213.560325
## iter 20 value 186.754464
## iter 30 value 169.867168
## iter 40 value 159.001757
## iter 50 value 151.835247
## iter 60 value 144.195038
## iter 70 value 143.340697
## iter 80 value 143.213255
## iter 90 value 143.052090
## iter 100 value 142.987263
## final value 142.987263
## stopped after 100 iterations
## # weights: 91
## initial value 430.156300
## iter 10 value 218.687248
## iter 20 value 176.764681
## iter 30 value 156.774042
## iter 40 value 140.343514
## iter 50 value 130.039464
## iter 60 value 123.126229
## iter 70 value 118.876331
## iter 80 value 114.180941
## iter 90 value 112.624115
## iter 100 value 112.074872
## final value 112.074872
## stopped after 100 iterations
## # weights: 11
## initial value 315.455912
## iter 10 value 221.456221
## iter 20 value 213.806596
## iter 30 value 213.175884
## final value 213.110811
## converged
## # weights: 31
## initial value 317.483146
## iter 10 value 214.335225
## iter 20 value 200.698716
## iter 30 value 199.291792
## iter 40 value 197.142150
## iter 50 value 194.175579
## iter 60 value 190.818862
## iter 70 value 189.820575
## iter 80 value 189.088047
## iter 90 value 188.779832
## iter 100 value 186.819547
## final value 186.819547
## stopped after 100 iterations
## # weights: 51
## initial value 335.433281
## iter 10 value 208.814669
```

```
## iter 20 value 186.125285
## iter 30 value 165.854131
## iter 40 value 158.205572
## iter 50 value 149.988159
## iter 60 value 142.010901
## iter 70 value 140.724062
## iter 80 value 140.670043
## final value 140.669984
## converged
## # weights: 71
## initial value 320.774963
## iter 10 value 201.066926
## iter 20 value 173.104724
## iter 30 value 155.584208
## iter 40 value 143.012558
## iter 50 value 130.949349
## iter 60 value 121.724482
## iter 70 value 117.830288
## iter 80 value 116.344264
## iter 90 value 115.945859
## iter 100 value 115.820993
## final value 115.820993
## stopped after 100 iterations
## # weights: 91
## initial value 306.598094
## iter 10 value 199.474058
## iter 20 value 171.237212
## iter 30 value 143.334879
## iter 40 value 113.851134
## iter 50 value 103.778550
## iter 60 value 100.165906
## iter 70 value 96.077203
## iter 80 value 91.210862
## iter 90 value 88.970766
## iter 100 value 88.621397
## final value 88.621397
## stopped after 100 iterations
## # weights: 11
## initial value 380.100055
## iter 10 value 222.321314
## iter 20 value 216.858551
## iter 30 value 216.747499
## final value 216.747475
## converged
## # weights: 31
## initial value 362.870593
## iter 10 value 211.056123
## iter 20 value 205.869557
## iter 30 value 204.096797
## iter 40 value 203.370334
## iter 50 value 203.261178
## final value 203.260998
## converged
## # weights: 51
```

```
## initial value 392.884373
## iter 10 value 223.344270
## iter 20 value 205.753618
## iter 30 value 195.424002
## iter 40 value 190.950127
## iter 50 value 189.954864
## iter 60 value 189.710189
## iter 70 value 189.676431
## iter 80 value 189.660247
## iter 90 value 189.658687
## iter 90 value 189.658686
## iter 90 value 189.658686
## final value 189.658686
## converged
## # weights: 71
## initial value 382.198353
## iter 10 value 209.073952
## iter 20 value 194.827425
## iter 30 value 188.009710
## iter 40 value 182.088976
## iter 50 value 179.375694
## iter 60 value 178.206868
## iter 70 value 177.441662
## iter 80 value 177.207843
## iter 90 value 177.169734
## iter 100 value 177.162494
## final value 177.162494
## stopped after 100 iterations
## # weights: 91
## initial value 321.485893
## iter 10 value 204.990516
## iter 20 value 192.652587
## iter 30 value 182.207174
## iter 40 value 175.173042
## iter 50 value 172.290989
## iter 60 value 170.963632
## iter 70 value 170.134154
## iter 80 value 169.702527
## iter 90 value 168.877409
## iter 100 value 167.817506
## final value 167.817506
## stopped after 100 iterations
## # weights: 11
## initial value 324.299856
## iter 10 value 221.575520
## iter 20 value 214.054154
## iter 30 value 213.665090
## final value 213.651921
## converged
## # weights: 31
## initial value 321.145521
## iter 10 value 225.490738
## iter 20 value 206.388601
## iter 30 value 195.180957
```

```
## iter 40 value 193.371930
## iter 50 value 193.123827
## iter 60 value 193.117317
## final value 193.117220
## converged
## # weights: 51
## initial value 345.502916
## iter 10 value 222.381836
## iter 20 value 191.177014
## iter 30 value 182.478122
## iter 40 value 173.058403
## iter 50 value 170.946916
## iter 60 value 169.964581
## iter 70 value 169.831590
## iter 80 value 169.673551
## iter 90 value 169.606255
## iter 100 value 169.593215
## final value 169.593215
## stopped after 100 iterations
## # weights: 71
## initial value 343.423250
## iter 10 value 207.041043
## iter 20 value 182.040374
## iter 30 value 169.942531
## iter 40 value 166.286241
## iter 50 value 162.311726
## iter 60 value 161.201312
## iter 70 value 159.460176
## iter 80 value 155.663477
## iter 90 value 152.994861
## iter 100 value 152.343582
## final value 152.343582
## stopped after 100 iterations
## # weights: 91
## initial value 311.693340
## iter 10 value 197.525139
## iter 20 value 165.965621
## iter 30 value 147.318809
## iter 40 value 135.016127
## iter 50 value 129.969220
## iter 60 value 128.616657
## iter 70 value 126.633812
## iter 80 value 121.356568
## iter 90 value 116.861094
## iter 100 value 114.690241
## final value 114.690241
## stopped after 100 iterations
## # weights: 11
## initial value 338.193685
## iter 10 value 226.289075
## iter 20 value 220.739659
## iter 30 value 213.517083
## iter 40 value 213.169137
## final value 213.167484
```



```
## converged
## # weights:  31
## initial  value 338.895635
## iter   10 value 208.895422
## iter   20 value 196.426839
## iter   30 value 193.043901
## iter   40 value 188.586877
## iter   50 value 186.927871
## iter   60 value 185.598172
## iter   70 value 185.369278
## iter   80 value 185.163695
## iter   90 value 185.088004
## final   value 185.073565
## converged
## # weights:  51
## initial  value 353.654817
## iter   10 value 203.943477
## iter   20 value 185.349192
## iter   30 value 176.836462
## iter   40 value 169.608442
## iter   50 value 165.909439
## iter   60 value 163.131699
## iter   70 value 160.741367
## iter   80 value 160.143139
## iter   90 value 158.650384
## iter  100 value 157.849799
## final   value 157.849799
## stopped after 100 iterations
## # weights:  71
## initial  value 403.992539
## iter   10 value 204.640115
## iter   20 value 171.798766
## iter   30 value 154.348598
## iter   40 value 143.986313
## iter   50 value 140.177873
## iter   60 value 137.745457
## iter   70 value 136.526738
## iter   80 value 136.110907
## iter   90 value 135.962953
## iter  100 value 135.876781
## final   value 135.876781
## stopped after 100 iterations
## # weights:  91
## initial  value 303.559453
## iter   10 value 203.854897
## iter   20 value 175.760184
## iter   30 value 149.839837
## iter   40 value 134.583498
## iter   50 value 128.752860
## iter   60 value 125.690863
## iter   70 value 123.510587
## iter   80 value 122.860485
## iter   90 value 122.172898
## iter  100 value 121.863367
```

```
## final value 121.863367
## stopped after 100 iterations
## # weights: 11
## initial value 348.714300
## iter 10 value 229.041090
## iter 20 value 224.499692
## iter 30 value 217.294166
## iter 40 value 213.262962
## iter 50 value 213.115343
## final value 213.115277
## converged
## # weights: 31
## initial value 335.075251
## iter 10 value 212.612155
## iter 20 value 198.532984
## iter 30 value 193.546103
## iter 40 value 189.247469
## iter 50 value 182.912399
## iter 60 value 182.458638
## iter 70 value 182.435257
## iter 80 value 182.417069
## iter 90 value 181.990000
## iter 100 value 181.942920
## final value 181.942920
## stopped after 100 iterations
## # weights: 51
## initial value 328.442332
## iter 10 value 207.412744
## iter 20 value 184.924760
## iter 30 value 173.003788
## iter 40 value 159.604088
## iter 50 value 152.835689
## iter 60 value 152.117891
## iter 70 value 151.990245
## iter 80 value 151.895000
## iter 90 value 151.775183
## iter 100 value 151.266242
## final value 151.266242
## stopped after 100 iterations
## # weights: 71
## initial value 321.008070
## iter 10 value 208.369139
## iter 20 value 180.575920
## iter 30 value 157.110545
## iter 40 value 148.653615
## iter 50 value 141.475340
## iter 60 value 135.181466
## iter 70 value 132.137821
## iter 80 value 129.920496
## iter 90 value 129.264586
## iter 100 value 128.981584
## final value 128.981584
## stopped after 100 iterations
## # weights: 91
```

```
## initial value 445.928388
## iter 10 value 203.593144
## iter 20 value 172.006950
## iter 30 value 133.081206
## iter 40 value 112.917633
## iter 50 value 97.760258
## iter 60 value 91.188570
## iter 70 value 87.486122
## iter 80 value 86.559841
## iter 90 value 85.794052
## iter 100 value 83.338876
## final value 83.338876
## stopped after 100 iterations
## # weights: 11
## initial value 313.163170
## iter 10 value 299.360953
## iter 20 value 218.901018
## iter 30 value 217.605192
## iter 40 value 217.469053
## iter 40 value 217.469053
## iter 40 value 217.469053
## final value 217.469053
## converged
## # weights: 31
## initial value 315.173595
## iter 10 value 213.183270
## iter 20 value 198.235329
## iter 30 value 189.922759
## iter 40 value 180.458363
## iter 50 value 177.104767
## iter 60 value 176.860552
## iter 70 value 176.856738
## iter 80 value 176.855887
## final value 176.855560
## converged
## # weights: 51
## initial value 304.830791
## iter 10 value 209.475616
## iter 20 value 185.782933
## iter 30 value 171.146363
## iter 40 value 158.915875
## iter 50 value 152.491520
## iter 60 value 143.877395
## iter 70 value 136.519161
## iter 80 value 134.319408
## iter 90 value 134.232257
## final value 134.231842
## converged
## # weights: 71
## initial value 451.238999
## iter 10 value 203.759031
## iter 20 value 167.255982
## iter 30 value 142.384657
## iter 40 value 131.888353
```

```
## iter 50 value 123.478139
## iter 60 value 118.599024
## iter 70 value 114.273972
## iter 80 value 109.675678
## iter 90 value 109.048884
## final value 109.048715
## converged
## # weights: 91
## initial value 445.302588
## iter 10 value 207.364923
## iter 20 value 177.929506
## iter 30 value 157.226686
## iter 40 value 140.017810
## iter 50 value 127.917130
## iter 60 value 118.310604
## iter 70 value 110.939458
## iter 80 value 109.441545
## iter 90 value 109.227416
## final value 109.225184
## converged
## # weights: 11
## initial value 346.008056
## iter 10 value 233.927672
## iter 20 value 224.196393
## iter 30 value 221.197875
## final value 221.112539
## converged
## # weights: 31
## initial value 375.214048
## iter 10 value 232.171792
## iter 20 value 214.887865
## iter 30 value 208.827703
## iter 40 value 204.839487
## iter 50 value 203.036742
## iter 60 value 202.622141
## final value 202.621289
## converged
## # weights: 51
## initial value 474.046486
## iter 10 value 226.191057
## iter 20 value 203.827800
## iter 30 value 193.313710
## iter 40 value 190.228065
## iter 50 value 189.736868
## iter 60 value 189.634754
## iter 70 value 189.588682
## iter 80 value 189.588451
## final value 189.588444
## converged
## # weights: 71
## initial value 376.405368
## iter 10 value 238.196078
## iter 20 value 211.118463
## iter 30 value 197.413380
```

```
## iter 40 value 191.375339
## iter 50 value 189.116020
## iter 60 value 187.432689
## iter 70 value 186.896797
## iter 80 value 186.386465
## iter 90 value 185.691672
## iter 100 value 184.288539
## final value 184.288539
## stopped after 100 iterations
## # weights: 91
## initial value 326.037213
## iter 10 value 216.842344
## iter 20 value 191.269045
## iter 30 value 180.767794
## iter 40 value 176.906037
## iter 50 value 176.100524
## iter 60 value 175.131343
## iter 70 value 172.579875
## iter 80 value 171.226236
## iter 90 value 170.448009
## iter 100 value 170.244510
## final value 170.244510
## stopped after 100 iterations
## # weights: 11
## initial value 387.427884
## iter 10 value 231.839344
## iter 20 value 226.117623
## iter 30 value 219.565674
## iter 40 value 217.931415
## iter 50 value 217.912692
## final value 217.912653
## converged
## # weights: 31
## initial value 321.782215
## iter 10 value 234.818715
## iter 20 value 218.836764
## iter 30 value 210.052433
## iter 40 value 207.315055
## iter 50 value 207.195596
## iter 60 value 207.036762
## iter 70 value 207.029628
## iter 80 value 207.027155
## iter 90 value 207.024516
## final value 207.024467
## converged
## # weights: 51
## initial value 312.462703
## iter 10 value 208.809239
## iter 20 value 188.725890
## iter 30 value 179.035374
## iter 40 value 176.465629
## iter 50 value 175.774735
## iter 60 value 175.443060
## iter 70 value 175.428621
```

```
## iter 80 value 175.395224
## iter 90 value 175.318621
## iter 100 value 175.303035
## final value 175.303035
## stopped after 100 iterations
## # weights: 71
## initial value 323.179188
## iter 10 value 207.644491
## iter 20 value 174.089246
## iter 30 value 155.070909
## iter 40 value 150.016792
## iter 50 value 148.573318
## iter 60 value 147.605194
## iter 70 value 146.329676
## iter 80 value 145.026389
## iter 90 value 143.434501
## iter 100 value 143.074702
## final value 143.074702
## stopped after 100 iterations
## # weights: 91
## initial value 374.046391
## iter 10 value 204.364395
## iter 20 value 173.588539
## iter 30 value 154.033608
## iter 40 value 147.367262
## iter 50 value 140.213867
## iter 60 value 137.125628
## iter 70 value 129.071228
## iter 80 value 125.336697
## iter 90 value 123.946257
## iter 100 value 122.680689
## final value 122.680689
## stopped after 100 iterations
## # weights: 11
## initial value 462.785063
## iter 10 value 263.144138
## iter 20 value 219.096259
## iter 30 value 217.777506
## iter 40 value 217.515240
## final value 217.515196
## converged
## # weights: 31
## initial value 318.105589
## iter 10 value 224.213504
## iter 20 value 211.285539
## iter 30 value 209.847841
## iter 40 value 205.067860
## iter 50 value 202.385268
## iter 60 value 198.209635
## iter 70 value 197.670176
## iter 80 value 197.071883
## iter 90 value 196.863283
## iter 100 value 196.842455
## final value 196.842455
```

```
## stopped after 100 iterations
## # weights:  51
## initial  value 390.195635
## iter   10 value 211.817948
## iter   20 value 195.695265
## iter   30 value 179.330765
## iter   40 value 170.861222
## iter   50 value 166.919432
## iter   60 value 163.607284
## iter   70 value 162.821735
## iter   80 value 162.315303
## iter   90 value 161.911590
## iter  100 value 161.734113
## final  value 161.734113
## stopped after 100 iterations
## # weights:  71
## initial  value 329.653134
## iter   10 value 203.426354
## iter   20 value 177.051524
## iter   30 value 158.071235
## iter   40 value 148.497800
## iter   50 value 145.178025
## iter   60 value 143.284747
## iter   70 value 141.121598
## iter   80 value 140.367459
## iter   90 value 139.819637
## iter  100 value 139.648519
## final  value 139.648519
## stopped after 100 iterations
## # weights:  91
## initial  value 387.132526
## iter   10 value 208.123792
## iter   20 value 160.853241
## iter   30 value 124.839481
## iter   40 value 110.175236
## iter   50 value 97.817597
## iter   60 value 95.143811
## iter   70 value 93.964442
## iter   80 value 92.488708
## iter   90 value 91.649128
## iter  100 value 91.286816
## final  value 91.286816
## stopped after 100 iterations
## # weights:  11
## initial  value 413.167698
## iter   10 value 248.050424
## iter   20 value 217.925288
## iter   30 value 217.492757
## final  value 217.475495
## converged
## # weights:  31
## initial  value 341.764453
## iter   10 value 214.445120
## iter   20 value 196.807981
```

```
## iter 30 value 193.661994
## iter 40 value 190.487608
## iter 50 value 186.049678
## iter 60 value 184.761671
## iter 70 value 184.620945
## iter 80 value 184.530951
## iter 90 value 184.417497
## iter 100 value 184.064741
## final value 184.064741
## stopped after 100 iterations
## # weights: 51
## initial value 406.360577
## iter 10 value 206.332112
## iter 20 value 197.245693
## iter 30 value 174.984406
## iter 40 value 164.703306
## iter 50 value 159.045081
## iter 60 value 154.010911
## iter 70 value 149.121585
## iter 80 value 147.830812
## iter 90 value 147.554576
## iter 100 value 147.378594
## final value 147.378594
## stopped after 100 iterations
## # weights: 71
## initial value 380.090574
## iter 10 value 204.431152
## iter 20 value 181.669456
## iter 30 value 170.277733
## iter 40 value 158.078133
## iter 50 value 153.965209
## iter 60 value 153.468998
## iter 70 value 153.041512
## iter 80 value 152.606581
## iter 90 value 152.540427
## iter 100 value 152.410772
## final value 152.410772
## stopped after 100 iterations
## # weights: 91
## initial value 372.497209
## iter 10 value 212.834688
## iter 20 value 180.451560
## iter 30 value 153.422683
## iter 40 value 127.604187
## iter 50 value 115.841377
## iter 60 value 105.912984
## iter 70 value 101.354039
## iter 80 value 100.480134
## iter 90 value 99.941478
## iter 100 value 99.818928
## final value 99.818928
## stopped after 100 iterations
## # weights: 11
## initial value 358.308959
```



```
## iter 10 value 243.565423
## iter 20 value 217.680662
## iter 30 value 217.235214
## iter 40 value 217.232664
## iter 40 value 217.232664
## iter 40 value 217.232664
## final value 217.232664
## converged
## # weights: 31
## initial value 336.758726
## iter 10 value 222.257780
## iter 20 value 206.549176
## iter 30 value 197.901520
## iter 40 value 194.589720
## iter 50 value 192.205741
## iter 60 value 190.751059
## iter 70 value 190.364263
## iter 80 value 190.223328
## iter 90 value 189.658375
## iter 100 value 189.414455
## final value 189.414455
## stopped after 100 iterations
## # weights: 51
## initial value 334.056509
## iter 10 value 212.813843
## iter 20 value 200.729148
## iter 30 value 190.796520
## iter 40 value 181.425225
## iter 50 value 168.875910
## iter 60 value 164.872308
## iter 70 value 162.504410
## iter 80 value 157.024518
## iter 90 value 153.957895
## iter 100 value 152.224358
## final value 152.224358
## stopped after 100 iterations
## # weights: 71
## initial value 336.901986
## iter 10 value 204.667467
## iter 20 value 176.158299
## iter 30 value 157.441555
## iter 40 value 149.402826
## iter 50 value 146.023761
## iter 60 value 141.649762
## iter 70 value 138.260322
## iter 80 value 132.490881
## iter 90 value 126.921991
## iter 100 value 123.465120
## final value 123.465120
## stopped after 100 iterations
## # weights: 91
## initial value 327.758632
## iter 10 value 207.370290
## iter 20 value 185.147576
```

```
## iter 30 value 165.927149
## iter 40 value 145.601009
## iter 50 value 131.467366
## iter 60 value 123.520069
## iter 70 value 112.596152
## iter 80 value 100.089102
## iter 90 value 92.089628
## iter 100 value 84.528107
## final value 84.528107
## stopped after 100 iterations
## # weights: 11
## initial value 370.317256
## iter 10 value 230.759970
## iter 20 value 221.426930
## iter 30 value 220.927237
## final value 220.919883
## converged
## # weights: 31
## initial value 331.837175
## iter 10 value 224.213014
## iter 20 value 209.708954
## iter 30 value 205.980367
## iter 40 value 205.581683
## iter 50 value 205.564448
## final value 205.563334
## converged
## # weights: 51
## initial value 306.012614
## iter 10 value 216.629970
## iter 20 value 203.428746
## iter 30 value 199.718121
## iter 40 value 197.335704
## iter 50 value 196.132075
## iter 60 value 195.329931
## iter 70 value 193.837568
## iter 80 value 192.059133
## iter 90 value 189.031451
## iter 100 value 188.438543
## final value 188.438543
## stopped after 100 iterations
## # weights: 71
## initial value 347.000281
## iter 10 value 211.963127
## iter 20 value 189.069122
## iter 30 value 185.104506
## iter 40 value 182.792823
## iter 50 value 179.451937
## iter 60 value 177.808286
## iter 70 value 176.059018
## iter 80 value 174.894270
## iter 90 value 174.585769
## iter 100 value 174.554390
## final value 174.554390
## stopped after 100 iterations
```

```
## # weights:  91
## initial  value 447.553934
## iter   10 value 210.657984
## iter   20 value 193.688349
## iter   30 value 182.493337
## iter   40 value 175.719862
## iter   50 value 171.722381
## iter   60 value 170.989648
## iter   70 value 170.497781
## iter   80 value 169.975075
## iter   90 value 169.225358
## iter  100 value 167.553961
## final   value 167.553961
## stopped after 100 iterations
## # weights:  11
## initial  value 319.652585
## iter   10 value 222.779789
## iter   20 value 218.292888
## iter   30 value 217.831838
## final   value 217.807082
## converged
## # weights:  31
## initial  value 317.773213
## iter   10 value 209.193114
## iter   20 value 204.307726
## iter   30 value 202.619013
## iter   40 value 201.910254
## iter   50 value 198.576779
## iter   60 value 195.236737
## iter   70 value 195.146004
## iter   80 value 195.135887
## iter   90 value 195.133243
## iter  100 value 195.132983
## final   value 195.132983
## stopped after 100 iterations
## # weights:  51
## initial  value 311.641985
## iter   10 value 213.721173
## iter   20 value 195.302669
## iter   30 value 180.677927
## iter   40 value 176.758617
## iter   50 value 176.584389
## iter   60 value 176.494932
## iter   70 value 176.415209
## iter   80 value 176.337098
## iter   90 value 176.333165
## final   value 176.333011
## converged
## # weights:  71
## initial  value 425.347683
## iter   10 value 206.150836
## iter   20 value 182.969610
## iter   30 value 167.922052
## iter   40 value 159.365697
```

```
## iter 50 value 155.711047
## iter 60 value 154.647779
## iter 70 value 153.993576
## iter 80 value 152.736841
## iter 90 value 148.483506
## iter 100 value 145.738511
## final value 145.738511
## stopped after 100 iterations
## # weights: 91
## initial value 336.455461
## iter 10 value 212.666910
## iter 20 value 184.020575
## iter 30 value 165.977925
## iter 40 value 149.166480
## iter 50 value 141.165429
## iter 60 value 138.713615
## iter 70 value 136.201821
## iter 80 value 134.333630
## iter 90 value 133.899054
## iter 100 value 133.559332
## final value 133.559332
## stopped after 100 iterations
## # weights: 11
## initial value 340.786268
## iter 10 value 231.889636
## iter 20 value 228.574538
## iter 30 value 221.537578
## iter 40 value 217.332640
## iter 50 value 217.284838
## final value 217.280053
## converged
## # weights: 31
## initial value 305.547577
## iter 10 value 208.919342
## iter 20 value 201.451891
## iter 30 value 197.520807
## iter 40 value 193.062315
## iter 50 value 188.890718
## iter 60 value 188.000232
## iter 70 value 187.864514
## iter 80 value 187.702023
## iter 90 value 186.407110
## iter 100 value 186.016835
## final value 186.016835
## stopped after 100 iterations
## # weights: 51
## initial value 325.142943
## iter 10 value 202.645827
## iter 20 value 186.105438
## iter 30 value 175.602699
## iter 40 value 167.722183
## iter 50 value 166.380169
## iter 60 value 165.510133
## iter 70 value 164.778960
```

```
## iter 80 value 164.658418
## iter 90 value 164.611863
## iter 100 value 164.548322
## final value 164.548322
## stopped after 100 iterations
## # weights: 71
## initial value 356.545024
## iter 10 value 203.405487
## iter 20 value 189.214811
## iter 30 value 172.406909
## iter 40 value 160.529892
## iter 50 value 153.859497
## iter 60 value 150.610282
## iter 70 value 150.078959
## iter 80 value 149.171718
## iter 90 value 148.259529
## iter 100 value 148.171482
## final value 148.171482
## stopped after 100 iterations
## # weights: 91
## initial value 315.698736
## iter 10 value 202.584661
## iter 20 value 175.320205
## iter 30 value 148.629256
## iter 40 value 133.640279
## iter 50 value 120.117745
## iter 60 value 117.290943
## iter 70 value 115.390748
## iter 80 value 115.031327
## iter 90 value 114.814684
## iter 100 value 114.627202
## final value 114.627202
## stopped after 100 iterations
## # weights: 11
## initial value 341.303094
## iter 10 value 232.460074
## iter 20 value 227.326130
## iter 30 value 220.367004
## iter 40 value 217.299032
## final value 217.238840
## converged
## # weights: 31
## initial value 494.132078
## iter 10 value 220.634686
## iter 20 value 210.874191
## iter 30 value 199.410735
## iter 40 value 195.614258
## iter 50 value 191.180081
## iter 60 value 188.735850
## iter 70 value 188.595188
## iter 80 value 188.525023
## iter 90 value 188.243552
## iter 100 value 188.043648
## final value 188.043648
```

```
## stopped after 100 iterations
## # weights:  51
## initial  value 315.215927
## iter   10 value 208.926291
## iter   20 value 189.601377
## iter   30 value 175.938946
## iter   40 value 172.200460
## iter   50 value 170.737882
## iter   60 value 167.681338
## iter   70 value 162.852943
## iter   80 value 161.727312
## iter   90 value 161.493777
## iter  100 value 161.242769
## final   value 161.242769
## stopped after 100 iterations
## # weights:  71
## initial  value 349.202345
## iter   10 value 205.633893
## iter   20 value 177.629470
## iter   30 value 154.150753
## iter   40 value 135.279271
## iter   50 value 125.642119
## iter   60 value 122.387327
## iter   70 value 120.519718
## iter   80 value 117.284535
## iter   90 value 116.556587
## iter  100 value 116.389655
## final   value 116.389655
## stopped after 100 iterations
## # weights:  91
## initial  value 384.461559
## iter   10 value 202.236939
## iter   20 value 153.012391
## iter   30 value 123.633723
## iter   40 value 112.237532
## iter   50 value 105.655832
## iter   60 value 98.733713
## iter   70 value 97.779788
## iter   80 value 97.488130
## iter   90 value 97.374258
## iter  100 value 97.146452
## final   value 97.146452
## stopped after 100 iterations
## # weights:  11
## initial  value 349.239867
## iter   10 value 243.045382
## iter   20 value 239.226476
## iter   30 value 238.098715
## iter   40 value 234.259625
## iter   50 value 228.796280
## iter   60 value 224.474679
## iter   70 value 223.915594
## final   value 223.915587
## converged
```

```
## # weights: 31
## initial value 312.284384
## iter 10 value 222.586540
## iter 20 value 214.158577
## iter 30 value 200.372145
## iter 40 value 197.379917
## iter 50 value 194.249643
## iter 60 value 189.619607
## iter 70 value 184.839940
## iter 80 value 184.309257
## iter 90 value 184.236908
## iter 100 value 184.218111
## final value 184.218111
## stopped after 100 iterations
## # weights: 51
## initial value 298.363931
## iter 10 value 210.067918
## iter 20 value 185.891313
## iter 30 value 175.397897
## iter 40 value 166.486090
## iter 50 value 159.822309
## iter 60 value 149.081780
## iter 70 value 146.964814
## iter 80 value 145.858770
## iter 90 value 145.849521
## final value 145.849509
## converged
## # weights: 71
## initial value 409.408759
## iter 10 value 210.959089
## iter 20 value 176.236594
## iter 30 value 161.249796
## iter 40 value 150.589271
## iter 50 value 141.025590
## iter 60 value 134.361377
## iter 70 value 131.845632
## iter 80 value 130.759159
## iter 90 value 128.476902
## iter 100 value 120.380813
## final value 120.380813
## stopped after 100 iterations
## # weights: 91
## initial value 333.102459
## iter 10 value 210.742010
## iter 20 value 166.798851
## iter 30 value 140.286233
## iter 40 value 111.948861
## iter 50 value 98.012955
## iter 60 value 91.609742
## iter 70 value 89.106677
## iter 80 value 83.435756
## iter 90 value 78.223364
## iter 100 value 75.829152
## final value 75.829152
```

```
## stopped after 100 iterations
## # weights: 11
## initial value 361.149181
## iter 10 value 230.417154
## iter 20 value 228.037532
## final value 228.035600
## converged
## # weights: 31
## initial value 360.886141
## iter 10 value 225.694134
## iter 20 value 210.696863
## iter 30 value 206.631370
## iter 40 value 205.115458
## iter 50 value 204.977367
## iter 60 value 204.962710
## iter 60 value 204.962709
## iter 60 value 204.962709
## final value 204.962709
## converged
## # weights: 51
## initial value 361.020379
## iter 10 value 217.749655
## iter 20 value 201.537904
## iter 30 value 193.155087
## iter 40 value 190.911194
## iter 50 value 190.564825
## iter 60 value 190.400954
## iter 70 value 190.367509
## iter 80 value 190.365963
## final value 190.365955
## converged
## # weights: 71
## initial value 381.330094
## iter 10 value 222.674608
## iter 20 value 206.835835
## iter 30 value 194.884367
## iter 40 value 188.855225
## iter 50 value 186.047681
## iter 60 value 185.448008
## iter 70 value 184.189427
## iter 80 value 183.746419
## iter 90 value 183.314770
## iter 100 value 183.132374
## final value 183.132374
## stopped after 100 iterations
## # weights: 91
## initial value 479.171846
## iter 10 value 234.724729
## iter 20 value 209.857617
## iter 30 value 188.211541
## iter 40 value 180.262404
## iter 50 value 177.239747
## iter 60 value 175.747525
## iter 70 value 175.243029
```



```
## iter 80 value 174.835900
## iter 90 value 174.703304
## iter 100 value 173.712235
## final value 173.712235
## stopped after 100 iterations
## # weights: 11
## initial value 454.907420
## iter 10 value 240.436431
## iter 20 value 226.026453
## iter 30 value 224.438919
## final value 224.431891
## converged
## # weights: 31
## initial value 339.497186
## iter 10 value 224.839424
## iter 20 value 208.055464
## iter 30 value 199.069998
## iter 40 value 196.414245
## iter 50 value 195.681319
## iter 60 value 195.583033
## iter 70 value 195.581332
## iter 80 value 195.581138
## final value 195.581072
## converged
## # weights: 51
## initial value 372.512572
## iter 10 value 210.346068
## iter 20 value 188.585563
## iter 30 value 184.360224
## iter 40 value 180.954489
## iter 50 value 179.989855
## iter 60 value 178.701572
## iter 70 value 177.151074
## iter 80 value 176.613141
## iter 90 value 176.516726
## iter 100 value 176.516091
## final value 176.516091
## stopped after 100 iterations
## # weights: 71
## initial value 434.592224
## iter 10 value 225.630974
## iter 20 value 194.505882
## iter 30 value 172.610409
## iter 40 value 163.604396
## iter 50 value 154.840046
## iter 60 value 153.533424
## iter 70 value 152.986714
## iter 80 value 152.812625
## iter 90 value 152.717202
## iter 100 value 152.655835
## final value 152.655835
## stopped after 100 iterations
## # weights: 91
## initial value 353.287076
```

```
## iter 10 value 213.161223
## iter 20 value 174.550857
## iter 30 value 152.200249
## iter 40 value 136.398884
## iter 50 value 131.908194
## iter 60 value 129.397643
## iter 70 value 127.644591
## iter 80 value 127.176512
## iter 90 value 126.434795
## iter 100 value 125.958944
## final value 125.958944
## stopped after 100 iterations
## # weights: 11
## initial value 330.886353
## iter 10 value 231.325745
## iter 20 value 226.003303
## iter 30 value 224.020488
## iter 40 value 223.969934
## iter 40 value 223.969934
## iter 40 value 223.969934
## final value 223.969934
## converged
## # weights: 31
## initial value 475.032959
## iter 10 value 217.016515
## iter 20 value 200.984567
## iter 30 value 198.397736
## iter 40 value 196.956931
## iter 50 value 193.937716
## iter 60 value 192.989991
## iter 70 value 192.490346
## iter 80 value 191.268677
## iter 90 value 190.952226
## iter 100 value 190.801456
## final value 190.801456
## stopped after 100 iterations
## # weights: 51
## initial value 375.661952
## iter 10 value 220.699860
## iter 20 value 202.947340
## iter 30 value 191.082636
## iter 40 value 182.548114
## iter 50 value 176.642020
## iter 60 value 175.064432
## iter 70 value 174.156349
## iter 80 value 173.357612
## iter 90 value 172.945138
## iter 100 value 172.907990
## final value 172.907990
## stopped after 100 iterations
## # weights: 71
## initial value 370.568638
## iter 10 value 219.088931
## iter 20 value 195.430885
```

```
## iter 30 value 178.342657
## iter 40 value 163.245362
## iter 50 value 156.597191
## iter 60 value 150.571906
## iter 70 value 144.300734
## iter 80 value 136.598501
## iter 90 value 133.232953
## iter 100 value 132.138660
## final value 132.138660
## stopped after 100 iterations
## # weights: 91
## initial value 329.124649
## iter 10 value 207.537475
## iter 20 value 165.881733
## iter 30 value 148.839554
## iter 40 value 136.195605
## iter 50 value 131.242009
## iter 60 value 125.098674
## iter 70 value 123.099099
## iter 80 value 122.367299
## iter 90 value 121.814947
## iter 100 value 121.254233
## final value 121.254233
## stopped after 100 iterations
## # weights: 11
## initial value 359.188978
## iter 10 value 230.266036
## iter 20 value 224.351126
## iter 30 value 223.925562
## iter 40 value 223.921137
## final value 223.921055
## converged
## # weights: 31
## initial value 324.313004
## iter 10 value 212.339833
## iter 20 value 201.531014
## iter 30 value 200.072059
## iter 40 value 195.487297
## iter 50 value 191.802650
## iter 60 value 190.621035
## iter 70 value 190.506057
## iter 80 value 190.466264
## iter 90 value 190.126638
## iter 100 value 189.856610
## final value 189.856610
## stopped after 100 iterations
## # weights: 51
## initial value 340.549925
## iter 10 value 216.115049
## iter 20 value 198.409309
## iter 30 value 187.613128
## iter 40 value 173.692249
## iter 50 value 164.218680
## iter 60 value 156.962697
```

```
## iter 70 value 156.536442
## iter 80 value 156.297979
## iter 90 value 156.112338
## iter 100 value 156.045845
## final value 156.045845
## stopped after 100 iterations
## # weights: 71
## initial value 411.413457
## iter 10 value 209.607791
## iter 20 value 178.863405
## iter 30 value 168.075199
## iter 40 value 158.910221
## iter 50 value 147.402525
## iter 60 value 142.557224
## iter 70 value 136.184722
## iter 80 value 131.248476
## iter 90 value 130.397400
## iter 100 value 129.755378
## final value 129.755378
## stopped after 100 iterations
## # weights: 91
## initial value 381.966143
## iter 10 value 207.675797
## iter 20 value 168.332671
## iter 30 value 121.016328
## iter 40 value 94.125909
## iter 50 value 84.387552
## iter 60 value 80.498805
## iter 70 value 78.848671
## iter 80 value 76.438500
## iter 90 value 75.690948
## iter 100 value 75.554193
## final value 75.554193
## stopped after 100 iterations
## # weights: 11
## initial value 326.815191
## iter 10 value 223.334946
## iter 20 value 218.280171
## iter 30 value 217.674654
## iter 40 value 217.634448
## final value 217.634302
## converged
## # weights: 31
## initial value 328.252279
## iter 10 value 216.842740
## iter 20 value 203.502730
## iter 30 value 186.332080
## iter 40 value 179.512715
## iter 50 value 175.410789
## iter 60 value 173.285390
## iter 70 value 171.624708
## iter 80 value 171.402443
## iter 90 value 171.393677
## iter 100 value 171.357235
```

```
## final value 171.357235
## stopped after 100 iterations
## # weights: 51
## initial value 323.428854
## iter 10 value 211.791936
## iter 20 value 199.832089
## iter 30 value 185.518298
## iter 40 value 175.957149
## iter 50 value 168.816279
## iter 60 value 162.512935
## iter 70 value 158.704640
## iter 80 value 158.032724
## iter 90 value 157.606958
## iter 100 value 157.374044
## final value 157.374044
## stopped after 100 iterations
## # weights: 71
## initial value 331.627808
## iter 10 value 213.394333
## iter 20 value 192.177639
## iter 30 value 169.880115
## iter 40 value 152.883402
## iter 50 value 140.596589
## iter 60 value 132.597105
## iter 70 value 128.513755
## iter 80 value 123.709566
## iter 90 value 118.542808
## iter 100 value 114.141574
## final value 114.141574
## stopped after 100 iterations
## # weights: 91
## initial value 332.275262
## iter 10 value 207.628650
## iter 20 value 174.775323
## iter 30 value 144.369625
## iter 40 value 127.533391
## iter 50 value 116.471116
## iter 60 value 106.188145
## iter 70 value 101.293088
## iter 80 value 98.841706
## iter 90 value 96.129614
## iter 100 value 93.113998
## final value 93.113998
## stopped after 100 iterations
## # weights: 11
## initial value 325.984826
## iter 10 value 226.358553
## iter 20 value 221.192954
## iter 30 value 221.177336
## iter 30 value 221.177334
## final value 221.177322
## converged
## # weights: 31
## initial value 344.649908
```

```
## iter 10 value 230.882138
## iter 20 value 214.956855
## iter 30 value 209.540673
## iter 40 value 207.339392
## iter 50 value 207.110613
## iter 60 value 207.085801
## final value 207.085732
## converged
## # weights: 51
## initial value 350.115572
## iter 10 value 218.617951
## iter 20 value 201.593147
## iter 30 value 195.746518
## iter 40 value 194.655752
## iter 50 value 194.394851
## iter 60 value 194.316279
## iter 70 value 194.298758
## iter 80 value 194.206848
## iter 90 value 194.165576
## final value 194.165355
## converged
## # weights: 71
## initial value 342.865932
## iter 10 value 211.875052
## iter 20 value 198.133923
## iter 30 value 186.585688
## iter 40 value 182.697446
## iter 50 value 182.137907
## iter 60 value 181.901615
## iter 70 value 179.041368
## iter 80 value 178.761844
## iter 90 value 178.678418
## iter 100 value 178.672404
## final value 178.672404
## stopped after 100 iterations
## # weights: 91
## initial value 294.049309
## iter 10 value 214.173469
## iter 20 value 196.347352
## iter 30 value 186.363439
## iter 40 value 181.158132
## iter 50 value 177.955596
## iter 60 value 176.404347
## iter 70 value 174.770946
## iter 80 value 173.054700
## iter 90 value 171.391794
## iter 100 value 170.938010
## final value 170.938010
## stopped after 100 iterations
## # weights: 11
## initial value 383.566159
## iter 10 value 272.316004
## iter 20 value 230.697364
## iter 30 value 222.993257
```

```
## iter 40 value 218.536252
## iter 50 value 218.057302
## iter 60 value 218.056478
## iter 60 value 218.056478
## iter 60 value 218.056478
## final value 218.056478
## converged
## # weights: 31
## initial value 348.548265
## iter 10 value 210.395511
## iter 20 value 203.562722
## iter 30 value 202.309036
## iter 40 value 198.190444
## iter 50 value 197.172668
## iter 60 value 195.941499
## iter 70 value 195.778709
## iter 80 value 195.578373
## iter 90 value 195.571445
## final value 195.571121
## converged
## # weights: 51
## initial value 312.579962
## iter 10 value 209.499718
## iter 20 value 189.530738
## iter 30 value 180.331288
## iter 40 value 178.346392
## iter 50 value 178.032275
## iter 60 value 177.954009
## iter 70 value 177.940095
## iter 80 value 177.936204
## final value 177.936158
## converged
## # weights: 71
## initial value 393.444915
## iter 10 value 215.154546
## iter 20 value 184.010535
## iter 30 value 166.215266
## iter 40 value 157.850088
## iter 50 value 151.448734
## iter 60 value 146.206030
## iter 70 value 144.490943
## iter 80 value 143.525511
## iter 90 value 143.030582
## iter 100 value 142.650344
## final value 142.650344
## stopped after 100 iterations
## # weights: 91
## initial value 380.643332
## iter 10 value 204.400881
## iter 20 value 180.390923
## iter 30 value 166.951459
## iter 40 value 160.161567
## iter 50 value 158.281116
## iter 60 value 157.007846
```

```
## iter 70 value 156.847107
## iter 80 value 156.720490
## iter 90 value 156.365835
## iter 100 value 156.118815
## final value 156.118815
## stopped after 100 iterations
## # weights: 11
## initial value 418.141053
## iter 10 value 232.291004
## iter 20 value 219.270206
## iter 30 value 217.880213
## iter 40 value 217.693290
## final value 217.693283
## converged
## # weights: 31
## initial value 374.161420
## iter 10 value 208.248485
## iter 20 value 189.143826
## iter 30 value 182.750952
## iter 40 value 181.019667
## iter 50 value 180.811841
## iter 60 value 180.746463
## iter 70 value 180.674514
## iter 80 value 180.651363
## iter 90 value 180.616981
## final value 180.616209
## converged
## # weights: 51
## initial value 336.833564
## iter 10 value 211.175103
## iter 20 value 191.951333
## iter 30 value 175.486173
## iter 40 value 172.610093
## iter 50 value 167.953717
## iter 60 value 164.638018
## iter 70 value 163.414728
## iter 80 value 160.939662
## iter 90 value 159.984997
## iter 100 value 159.692261
## final value 159.692261
## stopped after 100 iterations
## # weights: 71
## initial value 384.539804
## iter 10 value 205.418350
## iter 20 value 178.239784
## iter 30 value 153.057515
## iter 40 value 140.127144
## iter 50 value 126.858905
## iter 60 value 124.620714
## iter 70 value 123.735696
## iter 80 value 122.636025
## iter 90 value 121.654335
## iter 100 value 121.471935
## final value 121.471935
```



```
## stopped after 100 iterations
## # weights:  91
## initial  value 372.222383
## iter   10 value 209.991214
## iter   20 value 173.918981
## iter   30 value 145.366982
## iter   40 value 131.794593
## iter   50 value 122.962848
## iter   60 value 120.386825
## iter   70 value 118.396118
## iter   80 value 117.138466
## iter   90 value 116.455849
## iter  100 value 116.305614
## final   value 116.305614
## stopped after 100 iterations
## # weights:  11
## initial  value 317.795777
## iter   10 value 230.980967
## iter   20 value 224.792992
## iter   30 value 219.619610
## iter   40 value 217.679709
## final   value 217.640239
## converged
## # weights:  31
## initial  value 462.019092
## iter   10 value 208.419130
## iter   20 value 201.559883
## iter   30 value 196.317658
## iter   40 value 188.553485
## iter   50 value 182.506335
## iter   60 value 180.438351
## iter   70 value 179.774676
## iter   80 value 178.971506
## iter   90 value 176.710391
## iter  100 value 176.615994
## final   value 176.615994
## stopped after 100 iterations
## # weights:  51
## initial  value 324.525845
## iter   10 value 210.845334
## iter   20 value 187.877414
## iter   30 value 174.968793
## iter   40 value 161.773095
## iter   50 value 158.679912
## iter   60 value 158.051934
## iter   70 value 156.937414
## iter   80 value 156.247129
## iter   90 value 155.282988
## iter  100 value 154.801344
## final   value 154.801344
## stopped after 100 iterations
## # weights:  71
## initial  value 355.456869
## iter   10 value 209.078831
```

```
## iter 20 value 173.693648
## iter 30 value 150.632679
## iter 40 value 138.531220
## iter 50 value 129.472743
## iter 60 value 123.456764
## iter 70 value 119.136069
## iter 80 value 116.388661
## iter 90 value 116.003385
## iter 100 value 115.764372
## final value 115.764372
## stopped after 100 iterations
## # weights: 91
## initial value 585.668689
## iter 10 value 208.002147
## iter 20 value 179.126316
## iter 30 value 142.107390
## iter 40 value 115.881653
## iter 50 value 105.252320
## iter 60 value 99.167058
## iter 70 value 95.991550
## iter 80 value 93.837856
## iter 90 value 92.486613
## iter 100 value 92.014485
## final value 92.014485
## stopped after 100 iterations
## # weights: 11
## initial value 378.336146
## iter 10 value 226.275314
## iter 20 value 217.967317
## iter 30 value 217.163040
## iter 40 value 217.103103
## final value 217.103088
## converged
## # weights: 31
## initial value 323.624943
## iter 10 value 224.303147
## iter 20 value 201.668833
## iter 30 value 191.195262
## iter 40 value 189.142337
## iter 50 value 188.052634
## iter 60 value 182.590085
## iter 70 value 181.472523
## iter 80 value 180.735688
## iter 90 value 180.178478
## iter 100 value 180.031513
## final value 180.031513
## stopped after 100 iterations
## # weights: 51
## initial value 315.956109
## iter 10 value 212.566212
## iter 20 value 193.113174
## iter 30 value 177.287061
## iter 40 value 168.212293
## iter 50 value 162.909452
```

```
## iter 60 value 158.109848
## iter 70 value 154.994533
## iter 80 value 153.378677
## iter 90 value 153.015160
## iter 100 value 152.857946
## final value 152.857946
## stopped after 100 iterations
## # weights: 71
## initial value 324.711478
## iter 10 value 206.745128
## iter 20 value 163.706406
## iter 30 value 132.825328
## iter 40 value 117.871866
## iter 50 value 110.438862
## iter 60 value 102.748344
## iter 70 value 99.904735
## iter 80 value 99.614291
## iter 90 value 99.603888
## iter 100 value 99.328095
## final value 99.328095
## stopped after 100 iterations
## # weights: 91
## initial value 342.656849
## iter 10 value 204.858576
## iter 20 value 161.590135
## iter 30 value 133.431693
## iter 40 value 115.734425
## iter 50 value 96.168611
## iter 60 value 85.347233
## iter 70 value 82.030557
## iter 80 value 78.191969
## iter 90 value 71.248038
## iter 100 value 65.138974
## final value 65.138974
## stopped after 100 iterations
## # weights: 11
## initial value 313.446238
## iter 10 value 234.291270
## iter 20 value 221.885144
## iter 30 value 221.222300
## iter 40 value 221.220815
## iter 40 value 221.220815
## iter 40 value 221.220815
## final value 221.220815
## converged
## # weights: 31
## initial value 343.371257
## iter 10 value 232.247875
## iter 20 value 221.617362
## iter 30 value 214.085895
## iter 40 value 204.230198
## iter 50 value 201.217016
## iter 60 value 200.995029
## iter 70 value 200.967082
```

```
## iter 80 value 200.960063
## final value 200.959717
## converged
## # weights: 51
## initial value 304.736442
## iter 10 value 209.311754
## iter 20 value 196.754881
## iter 30 value 187.343725
## iter 40 value 185.683493
## iter 50 value 185.128943
## iter 60 value 185.046884
## iter 70 value 185.041624
## final value 185.041597
## converged
## # weights: 71
## initial value 306.496017
## iter 10 value 214.841752
## iter 20 value 201.168262
## iter 30 value 190.337517
## iter 40 value 184.098758
## iter 50 value 181.018277
## iter 60 value 180.011233
## iter 70 value 179.541902
## iter 80 value 179.395901
## iter 90 value 179.316248
## iter 100 value 179.261110
## final value 179.261110
## stopped after 100 iterations
## # weights: 91
## initial value 353.549287
## iter 10 value 207.727530
## iter 20 value 194.664265
## iter 30 value 183.805220
## iter 40 value 173.559470
## iter 50 value 167.174566
## iter 60 value 165.653133
## iter 70 value 165.263531
## iter 80 value 163.584311
## iter 90 value 163.389655
## iter 100 value 163.333442
## final value 163.333442
## stopped after 100 iterations
## # weights: 11
## initial value 342.933004
## iter 10 value 230.862069
## iter 20 value 218.058602
## iter 30 value 217.629780
## final value 217.607177
## converged
## # weights: 31
## initial value 352.537578
## iter 10 value 228.892087
## iter 20 value 215.872153
## iter 30 value 201.326636
```

```
## iter 40 value 193.970012
## iter 50 value 190.624070
## iter 60 value 188.391639
## iter 70 value 188.235086
## iter 80 value 188.223318
## iter 90 value 188.216567
## final value 188.216474
## converged
## # weights: 51
## initial value 332.033964
## iter 10 value 208.790603
## iter 20 value 179.246101
## iter 30 value 173.769694
## iter 40 value 173.099700
## iter 50 value 173.001153
## iter 60 value 172.979612
## iter 70 value 172.938791
## iter 80 value 172.932481
## final value 172.932376
## converged
## # weights: 71
## initial value 407.597902
## iter 10 value 207.020442
## iter 20 value 171.438962
## iter 30 value 157.748666
## iter 40 value 152.728150
## iter 50 value 152.138045
## iter 60 value 151.550935
## iter 70 value 151.284662
## iter 80 value 150.183073
## iter 90 value 149.397034
## iter 100 value 148.745990
## final value 148.745990
## stopped after 100 iterations
## # weights: 91
## initial value 362.020639
## iter 10 value 197.618763
## iter 20 value 168.201100
## iter 30 value 152.235890
## iter 40 value 143.079659
## iter 50 value 137.257598
## iter 60 value 134.202741
## iter 70 value 132.819130
## iter 80 value 131.655705
## iter 90 value 130.714252
## iter 100 value 130.466327
## final value 130.466327
## stopped after 100 iterations
## # weights: 11
## initial value 345.007006
## iter 10 value 234.297239
## iter 20 value 229.119460
## iter 30 value 226.200515
## iter 40 value 218.728099
```

```
## iter 50 value 217.189298
## iter 60 value 217.144152
## final value 217.143720
## converged
## # weights: 31
## initial value 331.297209
## iter 10 value 212.350635
## iter 20 value 200.696038
## iter 30 value 193.785390
## iter 40 value 192.342412
## iter 50 value 191.743990
## iter 60 value 191.563989
## iter 70 value 191.548539
## iter 80 value 191.537865
## iter 90 value 191.531294
## final value 191.531218
## converged
## # weights: 51
## initial value 385.858705
## iter 10 value 211.167571
## iter 20 value 186.392821
## iter 30 value 175.774105
## iter 40 value 168.227873
## iter 50 value 164.179563
## iter 60 value 163.095098
## iter 70 value 162.945811
## iter 80 value 162.688582
## iter 90 value 162.574705
## iter 100 value 162.143175
## final value 162.143175
## stopped after 100 iterations
## # weights: 71
## initial value 322.911452
## iter 10 value 207.347028
## iter 20 value 174.739873
## iter 30 value 149.162511
## iter 40 value 139.304837
## iter 50 value 134.276023
## iter 60 value 130.580833
## iter 70 value 129.316856
## iter 80 value 128.750871
## iter 90 value 128.399993
## iter 100 value 128.134799
## final value 128.134799
## stopped after 100 iterations
## # weights: 91
## initial value 462.997462
## iter 10 value 208.936102
## iter 20 value 164.823149
## iter 30 value 129.724479
## iter 40 value 114.668744
## iter 50 value 104.289465
## iter 60 value 98.291187
## iter 70 value 96.315912
```

```
## iter 80 value 94.386440
## iter 90 value 93.758302
## iter 100 value 93.336602
## final value 93.336602
## stopped after 100 iterations
## # weights: 11
## initial value 333.469398
## iter 10 value 228.987042
## iter 20 value 224.555048
## iter 30 value 221.145997
## iter 40 value 220.550947
## iter 50 value 220.141930
## final value 220.141890
## converged
## # weights: 31
## initial value 317.712172
## iter 10 value 198.416369
## iter 20 value 190.362060
## iter 30 value 188.085137
## iter 40 value 180.719730
## iter 50 value 180.017380
## iter 60 value 179.932111
## iter 70 value 179.916058
## iter 80 value 179.912212
## iter 90 value 179.908666
## iter 100 value 179.907960
## final value 179.907960
## stopped after 100 iterations
## # weights: 51
## initial value 372.125680
## iter 10 value 212.875683
## iter 20 value 191.589309
## iter 30 value 180.354592
## iter 40 value 173.058921
## iter 50 value 168.619798
## iter 60 value 160.205158
## iter 70 value 157.235910
## iter 80 value 155.957352
## iter 90 value 153.067593
## iter 100 value 152.129642
## final value 152.129642
## stopped after 100 iterations
## # weights: 71
## initial value 320.357822
## iter 10 value 210.183088
## iter 20 value 179.765718
## iter 30 value 151.645977
## iter 40 value 139.974769
## iter 50 value 131.676125
## iter 60 value 126.310287
## iter 70 value 119.069057
## iter 80 value 116.915368
## iter 90 value 116.092283
## iter 100 value 115.854660
```

```
## final value 115.854660
## stopped after 100 iterations
## # weights: 91
## initial value 310.761091
## iter 10 value 206.981501
## iter 20 value 169.791801
## iter 30 value 143.883973
## iter 40 value 131.463255
## iter 50 value 124.373212
## iter 60 value 119.580397
## iter 70 value 117.266571
## iter 80 value 116.252155
## iter 90 value 115.813495
## iter 100 value 115.356212
## final value 115.356212
## stopped after 100 iterations
## # weights: 11
## initial value 348.405688
## iter 10 value 228.367429
## iter 20 value 220.118303
## iter 30 value 218.754977
## final value 218.711739
## converged
## # weights: 31
## initial value 317.343972
## iter 10 value 221.113681
## iter 20 value 209.228425
## iter 30 value 196.373020
## iter 40 value 192.563484
## iter 50 value 188.311391
## iter 60 value 180.712399
## iter 70 value 179.115523
## iter 80 value 179.018689
## iter 90 value 178.982775
## iter 100 value 178.978345
## final value 178.978345
## stopped after 100 iterations
## # weights: 51
## initial value 414.213605
## iter 10 value 207.264655
## iter 20 value 174.106456
## iter 30 value 157.865101
## iter 40 value 146.897143
## iter 50 value 139.795370
## iter 60 value 129.824091
## iter 70 value 125.248287
## iter 80 value 124.187949
## iter 90 value 124.184745
## iter 90 value 124.184744
## iter 90 value 124.184744
## final value 124.184744
## converged
## # weights: 71
## initial value 322.179865
```



```
## iter 10 value 204.250730
## iter 20 value 177.385432
## iter 30 value 156.162457
## iter 40 value 140.515572
## iter 50 value 135.710512
## iter 60 value 126.820881
## iter 70 value 113.526238
## iter 80 value 112.096260
## iter 90 value 111.959293
## iter 100 value 111.919645
## final value 111.919645
## stopped after 100 iterations
## # weights: 91
## initial value 390.257729
## iter 10 value 204.644753
## iter 20 value 168.560818
## iter 30 value 140.345720
## iter 40 value 123.476074
## iter 50 value 115.948159
## iter 60 value 112.652175
## iter 70 value 108.552136
## iter 80 value 104.300760
## iter 90 value 97.492924
## iter 100 value 91.278009
## final value 91.278009
## stopped after 100 iterations
## # weights: 11
## initial value 309.883231
## iter 10 value 241.542812
## iter 20 value 226.187788
## iter 30 value 222.547668
## iter 40 value 221.909397
## iter 40 value 221.909396
## iter 40 value 221.909396
## final value 221.909396
## converged
## # weights: 31
## initial value 406.966182
## iter 10 value 224.072536
## iter 20 value 204.961829
## iter 30 value 202.117216
## iter 40 value 201.766940
## iter 50 value 201.534729
## final value 201.530683
## converged
## # weights: 51
## initial value 350.219036
## iter 10 value 215.002519
## iter 20 value 199.241597
## iter 30 value 196.352700
## iter 40 value 195.803369
## iter 50 value 195.123192
## iter 60 value 194.437021
## iter 70 value 194.420509
```

```
## final value 194.420357
## converged
## # weights: 71
## initial value 426.749471
## iter 10 value 247.032120
## iter 20 value 212.487353
## iter 30 value 198.326525
## iter 40 value 190.382508
## iter 50 value 183.193128
## iter 60 value 180.421877
## iter 70 value 179.862252
## iter 80 value 179.775304
## iter 90 value 179.757722
## iter 100 value 179.752992
## final value 179.752992
## stopped after 100 iterations
## # weights: 91
## initial value 404.378277
## iter 10 value 217.566083
## iter 20 value 198.314889
## iter 30 value 188.266213
## iter 40 value 181.042913
## iter 50 value 176.253414
## iter 60 value 173.449431
## iter 70 value 172.267077
## iter 80 value 172.132902
## iter 90 value 172.116962
## iter 100 value 172.110395
## final value 172.110395
## stopped after 100 iterations
## # weights: 11
## initial value 308.985795
## iter 10 value 221.035559
## iter 20 value 219.243565
## iter 30 value 219.171092
## final value 219.170913
## converged
## # weights: 31
## initial value 336.500972
## iter 10 value 231.450465
## iter 20 value 207.187836
## iter 30 value 204.153932
## iter 40 value 199.888695
## iter 50 value 198.435059
## iter 60 value 198.413171
## iter 70 value 198.412837
## iter 80 value 198.412752
## final value 198.412712
## converged
## # weights: 51
## initial value 311.194686
## iter 10 value 203.148406
## iter 20 value 181.435483
## iter 30 value 175.107211
```

```
## iter 40 value 174.547070
## iter 50 value 174.148534
## iter 60 value 174.021504
## iter 70 value 173.955424
## final value 173.952653
## converged
## # weights: 71
## initial value 342.363912
## iter 10 value 206.708256
## iter 20 value 187.975276
## iter 30 value 176.317590
## iter 40 value 165.821082
## iter 50 value 162.397402
## iter 60 value 159.595074
## iter 70 value 158.886281
## iter 80 value 158.608894
## iter 90 value 158.598474
## iter 100 value 158.597789
## final value 158.597789
## stopped after 100 iterations
## # weights: 91
## initial value 473.809408
## iter 10 value 206.902583
## iter 20 value 180.106629
## iter 30 value 163.160240
## iter 40 value 153.912850
## iter 50 value 143.367489
## iter 60 value 138.917036
## iter 70 value 136.559965
## iter 80 value 134.378241
## iter 90 value 132.636504
## iter 100 value 132.404155
## final value 132.404155
## stopped after 100 iterations
## # weights: 11
## initial value 314.356059
## iter 10 value 231.966022
## iter 20 value 222.358976
## iter 30 value 218.979968
## iter 40 value 218.748485
## final value 218.748479
## converged
## # weights: 31
## initial value 420.957283
## iter 10 value 216.787055
## iter 20 value 200.124426
## iter 30 value 193.386627
## iter 40 value 190.819345
## iter 50 value 190.708123
## iter 60 value 189.410722
## iter 70 value 189.123269
## iter 80 value 189.087170
## iter 90 value 188.997951
## final value 188.992682
```

```
## converged
## # weights:  51
## initial  value 374.876650
## iter   10 value 210.177179
## iter   20 value 192.786655
## iter   30 value 184.142590
## iter   40 value 175.466738
## iter   50 value 170.019318
## iter   60 value 168.591334
## iter   70 value 167.941015
## iter   80 value 167.441136
## iter   90 value 167.035883
## iter  100 value 166.904657
## final   value 166.904657
## stopped after 100 iterations
## # weights:  71
## initial  value 340.319657
## iter   10 value 210.486691
## iter   20 value 179.559949
## iter   30 value 159.624435
## iter   40 value 147.071976
## iter   50 value 142.651065
## iter   60 value 140.888459
## iter   70 value 139.959073
## iter   80 value 139.347383
## iter   90 value 138.282920
## iter  100 value 137.636474
## final   value 137.636474
## stopped after 100 iterations
## # weights:  91
## initial  value 511.881165
## iter   10 value 198.820979
## iter   20 value 163.381258
## iter   30 value 139.984040
## iter   40 value 123.709295
## iter   50 value 121.383747
## iter   60 value 118.264286
## iter   70 value 117.126716
## iter   80 value 116.737603
## iter   90 value 116.481939
## iter  100 value 116.380032
## final   value 116.380032
## stopped after 100 iterations
## # weights:  11
## initial  value 323.129383
## iter   10 value 230.238956
## iter   20 value 228.698831
## iter   30 value 226.807007
## iter   40 value 225.940096
## iter   50 value 225.846607
## iter   60 value 225.789234
## iter   70 value 225.787314
## final   value 225.786485
## converged
```

```
## # weights: 31
## initial value 324.171711
## iter 10 value 219.971631
## iter 20 value 206.816770
## iter 30 value 203.654319
## iter 40 value 200.089118
## iter 50 value 194.221153
## iter 60 value 193.063770
## iter 70 value 192.869387
## iter 80 value 192.821797
## iter 90 value 192.783618
## iter 100 value 192.543744
## final value 192.543744
## stopped after 100 iterations
## # weights: 51
## initial value 316.950804
## iter 10 value 204.876481
## iter 20 value 183.036436
## iter 30 value 172.827286
## iter 40 value 162.762635
## iter 50 value 154.956491
## iter 60 value 152.251179
## iter 70 value 150.930619
## iter 80 value 150.678183
## iter 90 value 150.478924
## iter 100 value 150.201285
## final value 150.201285
## stopped after 100 iterations
## # weights: 71
## initial value 348.638887
## iter 10 value 209.191762
## iter 20 value 186.709083
## iter 30 value 162.737395
## iter 40 value 152.842847
## iter 50 value 147.254961
## iter 60 value 136.218321
## iter 70 value 130.972822
## iter 80 value 129.478126
## iter 90 value 128.727508
## iter 100 value 128.501044
## final value 128.501044
## stopped after 100 iterations
## # weights: 91
## initial value 331.098666
## iter 10 value 209.291023
## iter 20 value 158.459295
## iter 30 value 134.219295
## iter 40 value 115.092739
## iter 50 value 107.550453
## iter 60 value 102.938484
## iter 70 value 99.274751
## iter 80 value 98.873572
## iter 90 value 98.678844
## iter 100 value 98.607478
```

```
## final value 98.607478
## stopped after 100 iterations
## # weights: 11
## initial value 389.005940
## iter 10 value 217.795610
## iter 20 value 213.425783
## iter 30 value 213.227587
## final value 213.226742
## converged
## # weights: 31
## initial value 332.633881
## iter 10 value 205.772857
## iter 20 value 195.881292
## iter 30 value 193.570297
## iter 40 value 188.370896
## iter 50 value 184.899867
## iter 60 value 184.839644
## final value 184.839560
## converged
## # weights: 51
## initial value 338.111118
## iter 10 value 205.487525
## iter 20 value 188.903638
## iter 30 value 178.345035
## iter 40 value 171.846657
## iter 50 value 168.866282
## iter 60 value 164.113049
## iter 70 value 157.623383
## iter 80 value 153.406354
## iter 90 value 151.584032
## iter 100 value 150.953463
## final value 150.953463
## stopped after 100 iterations
## # weights: 71
## initial value 392.762517
## iter 10 value 216.498073
## iter 20 value 189.719272
## iter 30 value 158.641207
## iter 40 value 144.658454
## iter 50 value 135.109115
## iter 60 value 129.109048
## iter 70 value 123.945214
## iter 80 value 119.116301
## iter 90 value 114.214311
## iter 100 value 112.139532
## final value 112.139532
## stopped after 100 iterations
## # weights: 91
## initial value 349.335403
## iter 10 value 205.320783
## iter 20 value 167.549522
## iter 30 value 134.315743
## iter 40 value 114.330920
## iter 50 value 102.251506
```

```
## iter 60 value 97.712552
## iter 70 value 93.185744
## iter 80 value 88.279383
## iter 90 value 81.580391
## iter 100 value 79.855336
## final value 79.855336
## stopped after 100 iterations
## # weights: 11
## initial value 324.659017
## iter 10 value 232.743299
## iter 20 value 218.177030
## iter 30 value 216.591955
## final value 216.562215
## converged
## # weights: 31
## initial value 325.978207
## iter 10 value 223.581001
## iter 20 value 209.548434
## iter 30 value 203.251943
## iter 40 value 200.925218
## iter 50 value 200.479175
## iter 60 value 200.337796
## iter 70 value 200.330102
## iter 80 value 200.326014
## final value 200.325430
## converged
## # weights: 51
## initial value 367.903236
## iter 10 value 209.125086
## iter 20 value 197.081505
## iter 30 value 192.003575
## iter 40 value 187.638552
## iter 50 value 185.441855
## iter 60 value 184.201045
## iter 70 value 184.001974
## iter 80 value 183.967563
## final value 183.967394
## converged
## # weights: 71
## initial value 310.241607
## iter 10 value 209.153171
## iter 20 value 198.092659
## iter 30 value 189.073455
## iter 40 value 184.609999
## iter 50 value 183.315227
## iter 60 value 182.387676
## iter 70 value 181.933406
## iter 80 value 181.067864
## iter 90 value 177.474288
## iter 100 value 176.604695
## final value 176.604695
## stopped after 100 iterations
## # weights: 91
## initial value 341.708248
```

```
## iter 10 value 209.320780
## iter 20 value 187.002347
## iter 30 value 178.816529
## iter 40 value 174.087459
## iter 50 value 169.715270
## iter 60 value 168.123452
## iter 70 value 166.444983
## iter 80 value 165.698773
## iter 90 value 165.454611
## iter 100 value 165.218326
## final value 165.218326
## stopped after 100 iterations
## # weights: 11
## initial value 311.783462
## iter 10 value 231.121123
## iter 20 value 225.043819
## iter 30 value 222.275588
## iter 40 value 220.912765
## iter 50 value 216.580709
## iter 60 value 214.027616
## iter 70 value 213.603270
## iter 70 value 213.603269
## iter 70 value 213.603269
## final value 213.603269
## converged
## # weights: 31
## initial value 304.359120
## iter 10 value 204.166860
## iter 20 value 193.744038
## iter 30 value 190.456050
## iter 40 value 189.674201
## iter 50 value 188.787045
## iter 60 value 188.744198
## final value 188.744004
## converged
## # weights: 51
## initial value 316.839449
## iter 10 value 212.874836
## iter 20 value 194.207463
## iter 30 value 186.052365
## iter 40 value 180.682824
## iter 50 value 177.677970
## iter 60 value 174.161931
## iter 70 value 173.689771
## iter 80 value 173.490164
## iter 90 value 173.432802
## iter 100 value 173.429182
## final value 173.429182
## stopped after 100 iterations
## # weights: 71
## initial value 311.469129
## iter 10 value 205.634286
## iter 20 value 174.407495
## iter 30 value 163.217783
```



```
## iter 40 value 159.691476
## iter 50 value 156.219644
## iter 60 value 149.923653
## iter 70 value 145.148577
## iter 80 value 144.543076
## iter 90 value 143.894881
## iter 100 value 143.778227
## final value 143.778227
## stopped after 100 iterations
## # weights: 91
## initial value 722.081428
## iter 10 value 200.363833
## iter 20 value 163.178925
## iter 30 value 139.537901
## iter 40 value 134.802222
## iter 50 value 132.402779
## iter 60 value 131.069409
## iter 70 value 130.720741
## iter 80 value 130.583455
## iter 90 value 130.485175
## iter 100 value 129.754340
## final value 129.754340
## stopped after 100 iterations
## # weights: 11
## initial value 358.620582
## iter 10 value 220.419887
## iter 20 value 219.898063
## iter 30 value 214.259005
## iter 40 value 213.275937
## final value 213.265201
## converged
## # weights: 31
## initial value 452.535447
## iter 10 value 208.444204
## iter 20 value 196.562833
## iter 30 value 188.046132
## iter 40 value 184.879054
## iter 50 value 183.840114
## iter 60 value 182.379805
## iter 70 value 181.410045
## iter 80 value 181.096439
## iter 90 value 180.991670
## iter 100 value 180.859439
## final value 180.859439
## stopped after 100 iterations
## # weights: 51
## initial value 309.664276
## iter 10 value 204.268016
## iter 20 value 187.191825
## iter 30 value 175.992362
## iter 40 value 169.070529
## iter 50 value 162.858523
## iter 60 value 159.611976
## iter 70 value 157.986300
```

```
## iter 80 value 155.947282
## iter 90 value 154.953231
## iter 100 value 154.773783
## final value 154.773783
## stopped after 100 iterations
## # weights: 71
## initial value 386.665527
## iter 10 value 207.378301
## iter 20 value 180.592271
## iter 30 value 163.988131
## iter 40 value 151.725494
## iter 50 value 140.275829
## iter 60 value 137.089966
## iter 70 value 135.487604
## iter 80 value 134.734467
## iter 90 value 133.002254
## iter 100 value 132.648898
## final value 132.648898
## stopped after 100 iterations
## # weights: 91
## initial value 315.773705
## iter 10 value 203.670653
## iter 20 value 172.588829
## iter 30 value 139.919703
## iter 40 value 125.392326
## iter 50 value 118.888366
## iter 60 value 112.583489
## iter 70 value 108.045022
## iter 80 value 106.900700
## iter 90 value 106.391840
## iter 100 value 105.958109
## final value 105.958109
## stopped after 100 iterations
## # weights: 11
## initial value 367.397192
## iter 10 value 233.897431
## iter 20 value 220.980953
## iter 30 value 220.632494
## iter 40 value 217.211159
## iter 50 value 216.841929
## final value 216.819304
## converged
## # weights: 31
## initial value 313.034160
## iter 10 value 214.268030
## iter 20 value 204.733260
## iter 30 value 193.144798
## iter 40 value 188.551211
## iter 50 value 185.933394
## iter 60 value 183.296183
## iter 70 value 182.760816
## iter 80 value 181.827043
## iter 90 value 180.137804
## iter 100 value 179.531909
```

```
## final value 179.531909
## stopped after 100 iterations
## # weights: 51
## initial value 476.500375
## iter 10 value 216.879227
## iter 20 value 194.750319
## iter 30 value 184.504505
## iter 40 value 170.525072
## iter 50 value 160.472512
## iter 60 value 159.212098
## iter 70 value 158.515769
## iter 80 value 158.018697
## iter 90 value 157.897386
## iter 100 value 157.875952
## final value 157.875952
## stopped after 100 iterations
## # weights: 71
## initial value 331.767950
## iter 10 value 198.864463
## iter 20 value 175.200211
## iter 30 value 161.356513
## iter 40 value 146.064616
## iter 50 value 135.375019
## iter 60 value 133.634803
## iter 70 value 133.104684
## iter 80 value 132.686523
## iter 90 value 132.104769
## iter 100 value 131.331288
## final value 131.331288
## stopped after 100 iterations
## # weights: 91
## initial value 337.926664
## iter 10 value 198.886090
## iter 20 value 164.041416
## iter 30 value 130.560704
## iter 40 value 106.069074
## iter 50 value 94.602434
## iter 60 value 86.819896
## iter 70 value 81.625575
## iter 80 value 77.873196
## iter 90 value 76.835498
## iter 100 value 74.961818
## final value 74.961818
## stopped after 100 iterations
## # weights: 11
## initial value 311.365647
## iter 10 value 232.992629
## iter 20 value 222.804945
## iter 30 value 216.915328
## iter 40 value 215.494887
## iter 50 value 215.170676
## iter 60 value 215.140275
## iter 70 value 215.015903
## iter 80 value 215.011229
```

```
## iter 90 value 214.989637
## final value 214.982933
## converged
## # weights: 31
## initial value 319.478680
## iter 10 value 221.661888
## iter 20 value 208.497094
## iter 30 value 202.662756
## iter 40 value 197.547287
## iter 50 value 194.228248
## iter 60 value 191.750964
## iter 70 value 190.139181
## iter 80 value 189.764849
## iter 90 value 189.566476
## iter 100 value 189.238055
## final value 189.238055
## stopped after 100 iterations
## # weights: 51
## initial value 350.522517
## iter 10 value 207.178334
## iter 20 value 188.357138
## iter 30 value 174.787181
## iter 40 value 162.296206
## iter 50 value 151.699274
## iter 60 value 150.510485
## iter 70 value 150.482508
## final value 150.482458
## converged
## # weights: 71
## initial value 343.630801
## iter 10 value 205.902864
## iter 20 value 184.018549
## iter 30 value 161.900959
## iter 40 value 148.826434
## iter 50 value 136.223077
## iter 60 value 129.354010
## iter 70 value 124.542065
## iter 80 value 122.029944
## iter 90 value 120.927810
## iter 100 value 120.558825
## final value 120.558825
## stopped after 100 iterations
## # weights: 91
## initial value 352.889299
## iter 10 value 208.410153
## iter 20 value 168.652422
## iter 30 value 133.577432
## iter 40 value 122.855127
## iter 50 value 109.274906
## iter 60 value 103.466876
## iter 70 value 102.482955
## iter 80 value 102.442063
## iter 90 value 102.437498
## iter 100 value 102.435729
```

```
## final value 102.435729
## stopped after 100 iterations
## # weights: 11
## initial value 329.433120
## iter 10 value 232.144950
## iter 20 value 222.432315
## iter 30 value 220.341092
## final value 220.191911
## converged
## # weights: 31
## initial value 373.675850
## iter 10 value 231.782917
## iter 20 value 214.387363
## iter 30 value 209.960097
## iter 40 value 207.581292
## iter 50 value 206.494477
## iter 60 value 206.141890
## iter 70 value 206.125563
## final value 206.124734
## converged
## # weights: 51
## initial value 453.688076
## iter 10 value 217.096194
## iter 20 value 200.651629
## iter 30 value 192.107517
## iter 40 value 191.271313
## iter 50 value 191.169986
## iter 60 value 191.115053
## iter 70 value 191.086927
## final value 191.086887
## converged
## # weights: 71
## initial value 384.624722
## iter 10 value 228.743752
## iter 20 value 209.879014
## iter 30 value 194.066853
## iter 40 value 188.571173
## iter 50 value 185.834616
## iter 60 value 184.560977
## iter 70 value 183.181202
## iter 80 value 181.079180
## iter 90 value 180.590333
## iter 100 value 180.006661
## final value 180.006661
## stopped after 100 iterations
## # weights: 91
## initial value 435.419523
## iter 10 value 211.943100
## iter 20 value 194.881380
## iter 30 value 183.986252
## iter 40 value 180.892735
## iter 50 value 174.809195
## iter 60 value 171.609910
## iter 70 value 170.121379
```

```
## iter 80 value 169.718874
## iter 90 value 169.552823
## iter 100 value 169.489572
## final value 169.489572
## stopped after 100 iterations
## # weights: 11
## initial value 343.612326
## iter 10 value 230.307176
## iter 20 value 227.345241
## iter 30 value 220.181070
## iter 40 value 216.593296
## iter 50 value 216.219962
## iter 60 value 216.188928
## final value 216.187177
## converged
## # weights: 31
## initial value 319.168991
## iter 10 value 213.286208
## iter 20 value 195.554923
## iter 30 value 194.011000
## iter 40 value 193.899648
## iter 50 value 193.846858
## iter 60 value 193.842534
## final value 193.842498
## converged
## # weights: 51
## initial value 365.206797
## iter 10 value 215.742607
## iter 20 value 194.462003
## iter 30 value 188.231562
## iter 40 value 183.492096
## iter 50 value 181.347701
## iter 60 value 180.633957
## iter 70 value 177.841673
## iter 80 value 174.055983
## iter 90 value 170.487138
## iter 100 value 169.858101
## final value 169.858101
## stopped after 100 iterations
## # weights: 71
## initial value 317.156322
## iter 10 value 200.566012
## iter 20 value 182.420055
## iter 30 value 170.003386
## iter 40 value 157.075059
## iter 50 value 149.633032
## iter 60 value 146.336348
## iter 70 value 145.191851
## iter 80 value 144.792995
## iter 90 value 144.660934
## iter 100 value 144.534112
## final value 144.534112
## stopped after 100 iterations
## # weights: 91
```

```
## initial value 312.256484
## iter 10 value 201.785024
## iter 20 value 170.969560
## iter 30 value 150.879678
## iter 40 value 143.237223
## iter 50 value 137.451570
## iter 60 value 134.651235
## iter 70 value 132.000914
## iter 80 value 131.135717
## iter 90 value 129.186214
## iter 100 value 128.386743
## final value 128.386743
## stopped after 100 iterations
## # weights: 11
## initial value 305.641289
## iter 10 value 222.690241
## iter 20 value 217.142273
## iter 30 value 216.095953
## iter 40 value 215.481362
## iter 50 value 215.293117
## iter 60 value 215.290619
## final value 215.282420
## converged
## # weights: 31
## initial value 298.377720
## iter 10 value 210.955041
## iter 20 value 196.481101
## iter 30 value 191.629154
## iter 40 value 187.666981
## iter 50 value 186.122091
## iter 60 value 183.863360
## iter 70 value 183.268549
## iter 80 value 180.938727
## iter 90 value 180.729718
## iter 100 value 180.556218
## final value 180.556218
## stopped after 100 iterations
## # weights: 51
## initial value 408.692959
## iter 10 value 212.782536
## iter 20 value 195.774616
## iter 30 value 184.097119
## iter 40 value 179.774015
## iter 50 value 177.230448
## iter 60 value 174.355281
## iter 70 value 174.018794
## iter 80 value 173.924333
## iter 90 value 173.886565
## iter 100 value 173.833229
## final value 173.833229
## stopped after 100 iterations
## # weights: 71
## initial value 382.006405
## iter 10 value 219.335710
```

```
## iter 20 value 206.968310
## iter 30 value 183.164804
## iter 40 value 165.691391
## iter 50 value 157.309942
## iter 60 value 147.891849
## iter 70 value 144.352406
## iter 80 value 142.863077
## iter 90 value 142.383668
## iter 100 value 141.623156
## final value 141.623156
## stopped after 100 iterations
## # weights: 91
## initial value 312.866685
## iter 10 value 199.795085
## iter 20 value 162.410990
## iter 30 value 134.374703
## iter 40 value 107.877873
## iter 50 value 98.549264
## iter 60 value 96.070295
## iter 70 value 93.695165
## iter 80 value 92.180220
## iter 90 value 91.370861
## iter 100 value 91.181404
## final value 91.181404
## stopped after 100 iterations
## # weights: 11
## initial value 346.009405
## iter 10 value 228.500860
## iter 20 value 223.354662
## iter 30 value 217.326024
## iter 40 value 215.778680
## iter 50 value 215.198262
## iter 60 value 215.185236
## iter 70 value 215.102448
## final value 215.092871
## converged
## # weights: 31
## initial value 344.732530
## iter 10 value 219.327930
## iter 20 value 198.852437
## iter 30 value 195.455236
## iter 40 value 192.274639
## iter 50 value 189.669923
## iter 60 value 187.900424
## iter 70 value 187.282448
## iter 80 value 187.240959
## iter 90 value 186.793310
## iter 100 value 186.261898
## final value 186.261898
## stopped after 100 iterations
## # weights: 51
## initial value 326.628011
## iter 10 value 211.566641
## iter 20 value 195.851818
```



```
## iter 30 value 173.649791
## iter 40 value 168.669335
## iter 50 value 159.184904
## iter 60 value 158.440772
## iter 70 value 158.049477
## iter 80 value 157.367179
## iter 90 value 157.162244
## iter 100 value 156.705019
## final value 156.705019
## stopped after 100 iterations
## # weights: 71
## initial value 298.460571
## iter 10 value 208.798931
## iter 20 value 172.891196
## iter 30 value 139.518609
## iter 40 value 125.633854
## iter 50 value 120.798646
## iter 60 value 118.126489
## iter 70 value 117.280604
## iter 80 value 116.318379
## iter 90 value 114.131577
## iter 100 value 113.282061
## final value 113.282061
## stopped after 100 iterations
## # weights: 91
## initial value 390.521469
## iter 10 value 200.333836
## iter 20 value 167.511580
## iter 30 value 149.649850
## iter 40 value 142.870810
## iter 50 value 138.557173
## iter 60 value 131.105902
## iter 70 value 129.498005
## iter 80 value 129.034816
## iter 90 value 128.858111
## iter 100 value 128.028721
## final value 128.028721
## stopped after 100 iterations
## # weights: 11
## initial value 318.230368
## iter 10 value 223.369670
## iter 20 value 220.774975
## iter 30 value 220.738595
## final value 220.737782
## converged
## # weights: 31
## initial value 325.741471
## iter 10 value 224.137468
## iter 20 value 206.044407
## iter 30 value 201.814308
## iter 40 value 196.733382
## iter 50 value 193.791638
## iter 60 value 189.069627
## iter 70 value 187.437288
```

```
## iter 80 value 186.464930
## iter 90 value 185.924161
## iter 100 value 185.824051
## final value 185.824051
## stopped after 100 iterations
## # weights: 51
## initial value 325.407165
## iter 10 value 218.519703
## iter 20 value 203.285847
## iter 30 value 189.584488
## iter 40 value 181.933519
## iter 50 value 177.910803
## iter 60 value 173.210378
## iter 70 value 170.942722
## iter 80 value 165.945461
## iter 90 value 159.581477
## iter 100 value 158.581207
## final value 158.581207
## stopped after 100 iterations
## # weights: 71
## initial value 342.010782
## iter 10 value 214.864583
## iter 20 value 183.628669
## iter 30 value 161.661285
## iter 40 value 142.159568
## iter 50 value 130.503142
## iter 60 value 124.433051
## iter 70 value 118.116743
## iter 80 value 117.762550
## iter 90 value 117.708552
## final value 117.708398
## converged
## # weights: 91
## initial value 362.930346
## iter 10 value 216.009573
## iter 20 value 175.801073
## iter 30 value 149.407036
## iter 40 value 136.653273
## iter 50 value 125.620256
## iter 60 value 116.088781
## iter 70 value 109.933931
## iter 80 value 104.133750
## iter 90 value 102.973651
## iter 100 value 102.692358
## final value 102.692358
## stopped after 100 iterations
## # weights: 11
## initial value 329.482988
## iter 10 value 229.384986
## iter 20 value 224.962292
## final value 224.934005
## converged
## # weights: 31
## initial value 319.941144
```

```
## iter 10 value 222.644145
## iter 20 value 206.883512
## iter 30 value 206.383416
## iter 40 value 206.295816
## iter 50 value 206.292679
## final value 206.292670
## converged
## # weights: 51
## initial value 323.450692
## iter 10 value 233.284161
## iter 20 value 206.651387
## iter 30 value 200.599439
## iter 40 value 197.999995
## iter 50 value 196.798023
## iter 60 value 196.193091
## iter 70 value 196.136506
## final value 196.136051
## converged
## # weights: 71
## initial value 329.919356
## iter 10 value 219.456142
## iter 20 value 201.087832
## iter 30 value 192.289622
## iter 40 value 186.806999
## iter 50 value 185.411499
## iter 60 value 184.675902
## iter 70 value 182.789634
## iter 80 value 181.567540
## iter 90 value 181.249113
## iter 100 value 180.489521
## final value 180.489521
## stopped after 100 iterations
## # weights: 91
## initial value 355.919317
## iter 10 value 217.340388
## iter 20 value 200.028540
## iter 30 value 187.676922
## iter 40 value 180.021184
## iter 50 value 174.991401
## iter 60 value 172.187973
## iter 70 value 171.021230
## iter 80 value 169.180987
## iter 90 value 168.040910
## iter 100 value 167.786730
## final value 167.786730
## stopped after 100 iterations
## # weights: 11
## initial value 326.299280
## iter 10 value 230.091109
## iter 20 value 222.548709
## iter 30 value 221.332008
## iter 40 value 221.143188
## iter 40 value 221.143188
## iter 40 value 221.143188
```

```
## final value 221.143188
## converged
## # weights: 31
## initial value 313.038876
## iter 10 value 218.707061
## iter 20 value 200.360009
## iter 30 value 196.991623
## iter 40 value 195.285223
## iter 50 value 194.193835
## iter 60 value 191.808535
## iter 70 value 191.143445
## iter 80 value 191.133394
## final value 191.133275
## converged
## # weights: 51
## initial value 346.016360
## iter 10 value 216.604901
## iter 20 value 190.815880
## iter 30 value 181.134733
## iter 40 value 176.573453
## iter 50 value 175.301921
## iter 60 value 174.454201
## iter 70 value 174.363729
## iter 80 value 174.350257
## iter 90 value 174.348026
## final value 174.347876
## converged
## # weights: 71
## initial value 358.338293
## iter 10 value 224.568226
## iter 20 value 196.322594
## iter 30 value 175.845930
## iter 40 value 166.200557
## iter 50 value 159.568628
## iter 60 value 155.844532
## iter 70 value 153.429487
## iter 80 value 150.950154
## iter 90 value 150.110369
## iter 100 value 149.487069
## final value 149.487069
## stopped after 100 iterations
## # weights: 91
## initial value 378.198470
## iter 10 value 218.555389
## iter 20 value 187.720927
## iter 30 value 154.839405
## iter 40 value 143.456708
## iter 50 value 138.540555
## iter 60 value 137.925720
## iter 70 value 137.579701
## iter 80 value 137.235346
## iter 90 value 135.573876
## iter 100 value 133.985874
## final value 133.985874
```

```
## stopped after 100 iterations
## # weights: 11
## initial value 413.075669
## iter 10 value 224.991989
## iter 20 value 220.900266
## iter 30 value 220.808132
## final value 220.779689
## converged
## # weights: 31
## initial value 490.114093
## iter 10 value 232.603870
## iter 20 value 209.940797
## iter 30 value 201.095427
## iter 40 value 199.036596
## iter 50 value 197.494979
## iter 60 value 196.606499
## iter 70 value 196.216404
## iter 80 value 195.913317
## iter 90 value 194.411348
## iter 100 value 193.857870
## final value 193.857870
## stopped after 100 iterations
## # weights: 51
## initial value 323.056760
## iter 10 value 209.350505
## iter 20 value 190.279784
## iter 30 value 179.500058
## iter 40 value 173.611599
## iter 50 value 169.918143
## iter 60 value 169.507308
## iter 70 value 169.193620
## iter 80 value 169.108165
## iter 90 value 168.898863
## iter 100 value 168.818831
## final value 168.818831
## stopped after 100 iterations
## # weights: 71
## initial value 332.091993
## iter 10 value 210.999373
## iter 20 value 182.404552
## iter 30 value 161.794175
## iter 40 value 153.988299
## iter 50 value 150.654223
## iter 60 value 147.320952
## iter 70 value 141.931280
## iter 80 value 138.881895
## iter 90 value 137.543078
## iter 100 value 137.295204
## final value 137.295204
## stopped after 100 iterations
## # weights: 91
## initial value 304.079713
## iter 10 value 205.948633
## iter 20 value 157.589117
```

```
## iter 30 value 139.612250
## iter 40 value 126.884447
## iter 50 value 117.946689
## iter 60 value 114.358055
## iter 70 value 111.648014
## iter 80 value 109.493386
## iter 90 value 109.039223
## iter 100 value 108.274846
## final value 108.274846
## stopped after 100 iterations
## # weights: 11
## initial value 348.008120
## iter 10 value 235.127792
## iter 20 value 232.721178
## iter 30 value 231.826238
## iter 40 value 231.372149
## iter 50 value 229.957452
## final value 229.913228
## converged
## # weights: 31
## initial value 317.668313
## iter 10 value 228.429038
## iter 20 value 209.345793
## iter 30 value 202.013961
## iter 40 value 196.479671
## iter 50 value 193.450047
## iter 60 value 189.995211
## iter 70 value 189.856613
## iter 80 value 189.810021
## iter 90 value 189.789615
## iter 100 value 189.700481
## final value 189.700481
## stopped after 100 iterations
## # weights: 51
## initial value 452.014047
## iter 10 value 220.883460
## iter 20 value 194.478426
## iter 30 value 186.217139
## iter 40 value 171.486551
## iter 50 value 163.044668
## iter 60 value 154.559067
## iter 70 value 151.129645
## iter 80 value 149.970797
## iter 90 value 149.778628
## iter 100 value 149.557154
## final value 149.557154
## stopped after 100 iterations
## # weights: 71
## initial value 352.502916
## iter 10 value 221.156675
## iter 20 value 201.438638
## iter 30 value 177.989640
## iter 40 value 156.583189
## iter 50 value 147.486335
```

```
## iter 60 value 139.475991
## iter 70 value 131.569670
## iter 80 value 127.127558
## iter 90 value 126.144952
## iter 100 value 125.023447
## final value 125.023447
## stopped after 100 iterations
## # weights: 91
## initial value 340.619844
## iter 10 value 205.956399
## iter 20 value 170.544077
## iter 30 value 145.907795
## iter 40 value 123.758859
## iter 50 value 113.055391
## iter 60 value 104.760121
## iter 70 value 99.840720
## iter 80 value 99.475484
## iter 90 value 99.214946
## iter 100 value 99.122198
## final value 99.122198
## stopped after 100 iterations
## # weights: 11
## initial value 369.204078
## iter 10 value 223.550056
## iter 20 value 215.143211
## iter 30 value 214.793727
## final value 214.775827
## converged
## # weights: 31
## initial value 324.654641
## iter 10 value 221.847101
## iter 20 value 205.068316
## iter 30 value 199.749201
## iter 40 value 193.383684
## iter 50 value 184.290576
## iter 60 value 175.059506
## iter 70 value 173.083863
## iter 80 value 172.600887
## iter 90 value 172.592534
## iter 100 value 172.580984
## final value 172.580984
## stopped after 100 iterations
## # weights: 51
## initial value 308.290384
## iter 10 value 205.322788
## iter 20 value 174.909159
## iter 30 value 162.398639
## iter 40 value 155.682628
## iter 50 value 142.534388
## iter 60 value 133.642987
## iter 70 value 132.324148
## iter 80 value 132.277424
## final value 132.276527
## converged
```

```
## # weights: 71
## initial value 341.739714
## iter 10 value 200.323559
## iter 20 value 167.085530
## iter 30 value 145.324425
## iter 40 value 137.376740
## iter 50 value 126.026032
## iter 60 value 119.460409
## iter 70 value 117.725178
## iter 80 value 117.625518
## iter 90 value 117.613627
## iter 100 value 117.611223
## final value 117.611223
## stopped after 100 iterations
## # weights: 91
## initial value 384.639398
## iter 10 value 200.627862
## iter 20 value 162.828565
## iter 30 value 123.182671
## iter 40 value 112.919485
## iter 50 value 107.291828
## iter 60 value 99.823136
## iter 70 value 92.439647
## iter 80 value 90.543423
## iter 90 value 90.474048
## iter 100 value 90.469344
## final value 90.469344
## stopped after 100 iterations
## # weights: 11
## initial value 330.903847
## iter 10 value 253.999258
## iter 20 value 225.710569
## iter 30 value 220.297557
## iter 40 value 219.114410
## final value 219.114339
## converged
## # weights: 31
## initial value 322.427931
## iter 10 value 240.449012
## iter 20 value 221.648979
## iter 30 value 212.837345
## iter 40 value 206.040264
## iter 50 value 205.022770
## iter 60 value 204.986677
## iter 70 value 204.986105
## final value 204.986016
## converged
## # weights: 51
## initial value 331.158245
## iter 10 value 220.006931
## iter 20 value 206.899502
## iter 30 value 199.390492
## iter 40 value 194.010118
## iter 50 value 190.927473
```



```
## iter 60 value 189.954091
## iter 70 value 189.612600
## iter 80 value 189.335839
## iter 90 value 189.151286
## iter 100 value 189.071405
## final value 189.071405
## stopped after 100 iterations
## # weights: 71
## initial value 351.499575
## iter 10 value 210.940368
## iter 20 value 198.517317
## iter 30 value 188.780207
## iter 40 value 186.402933
## iter 50 value 183.268857
## iter 60 value 181.408832
## iter 70 value 179.584574
## iter 80 value 178.030984
## iter 90 value 177.594480
## iter 100 value 176.888738
## final value 176.888738
## stopped after 100 iterations
## # weights: 91
## initial value 316.716244
## iter 10 value 209.645227
## iter 20 value 185.491427
## iter 30 value 175.651832
## iter 40 value 171.784938
## iter 50 value 170.210629
## iter 60 value 169.536433
## iter 70 value 169.028393
## iter 80 value 168.954075
## iter 90 value 168.943443
## iter 100 value 168.930677
## final value 168.930677
## stopped after 100 iterations
## # weights: 11
## initial value 329.291290
## iter 10 value 232.179680
## iter 20 value 220.319640
## iter 30 value 215.599824
## iter 40 value 215.179139
## final value 215.178009
## converged
## # weights: 31
## initial value 316.278332
## iter 10 value 210.768962
## iter 20 value 198.066584
## iter 30 value 193.913712
## iter 40 value 191.526308
## iter 50 value 190.914180
## iter 60 value 190.828308
## iter 70 value 190.789704
## iter 80 value 190.779409
## iter 90 value 190.777620
```

```
## final value 190.777556
## converged
## # weights: 51
## initial value 311.927871
## iter 10 value 214.746130
## iter 20 value 193.528504
## iter 30 value 184.559398
## iter 40 value 180.540766
## iter 50 value 177.269682
## iter 60 value 175.666675
## iter 70 value 174.538540
## iter 80 value 172.930455
## iter 90 value 172.401663
## iter 100 value 172.103205
## final value 172.103205
## stopped after 100 iterations
## # weights: 71
## initial value 329.308076
## iter 10 value 217.835596
## iter 20 value 190.738454
## iter 30 value 174.888249
## iter 40 value 167.245461
## iter 50 value 161.969484
## iter 60 value 158.335218
## iter 70 value 154.882671
## iter 80 value 153.634266
## iter 90 value 152.860219
## iter 100 value 152.525833
## final value 152.525833
## stopped after 100 iterations
## # weights: 91
## initial value 334.713235
## iter 10 value 205.328543
## iter 20 value 172.203392
## iter 30 value 151.923535
## iter 40 value 138.080446
## iter 50 value 133.197904
## iter 60 value 130.698958
## iter 70 value 128.819516
## iter 80 value 125.532396
## iter 90 value 123.964285
## iter 100 value 123.449133
## final value 123.449133
## stopped after 100 iterations
## # weights: 11
## initial value 328.410341
## iter 10 value 234.901645
## iter 20 value 221.980217
## iter 30 value 217.315639
## iter 40 value 214.873747
## iter 50 value 214.822523
## final value 214.817111
## converged
## # weights: 31
```

```
## initial value 334.239178
## iter 10 value 219.196127
## iter 20 value 201.988469
## iter 30 value 191.796850
## iter 40 value 185.821128
## iter 50 value 185.701655
## iter 60 value 185.631762
## iter 70 value 185.484921
## iter 80 value 185.455787
## iter 90 value 185.309256
## iter 100 value 185.278849
## final value 185.278849
## stopped after 100 iterations
## # weights: 51
## initial value 323.066798
## iter 10 value 205.716334
## iter 20 value 187.333232
## iter 30 value 175.210721
## iter 40 value 172.625135
## iter 50 value 172.471019
## iter 60 value 172.288773
## iter 70 value 172.137274
## iter 80 value 172.112254
## iter 90 value 172.078168
## iter 100 value 172.061314
## final value 172.061314
## stopped after 100 iterations
## # weights: 71
## initial value 350.914027
## iter 10 value 209.920613
## iter 20 value 191.226957
## iter 30 value 174.040097
## iter 40 value 154.077360
## iter 50 value 143.216302
## iter 60 value 139.663382
## iter 70 value 138.510878
## iter 80 value 135.042402
## iter 90 value 134.622010
## iter 100 value 134.175240
## final value 134.175240
## stopped after 100 iterations
## # weights: 91
## initial value 358.349534
## iter 10 value 212.212082
## iter 20 value 189.190337
## iter 30 value 165.959072
## iter 40 value 140.515291
## iter 50 value 126.684749
## iter 60 value 122.697260
## iter 70 value 120.034994
## iter 80 value 119.021938
## iter 90 value 118.475133
## iter 100 value 118.011975
## final value 118.011975
```

```
## stopped after 100 iterations
## # weights: 11
## initial value 329.399395
## iter 10 value 223.277261
## iter 20 value 218.446135
## iter 30 value 215.495705
## iter 40 value 214.781637
## final value 214.781380
## converged
## # weights: 31
## initial value 333.425254
## iter 10 value 209.734455
## iter 20 value 200.540660
## iter 30 value 190.160004
## iter 40 value 186.874652
## iter 50 value 180.910527
## iter 60 value 180.636096
## iter 70 value 180.574121
## iter 80 value 180.384706
## iter 90 value 180.382283
## iter 100 value 180.381671
## final value 180.381671
## stopped after 100 iterations
## # weights: 51
## initial value 372.859926
## iter 10 value 205.715397
## iter 20 value 187.902169
## iter 30 value 169.596392
## iter 40 value 160.266514
## iter 50 value 151.856053
## iter 60 value 150.830540
## iter 70 value 150.603821
## iter 80 value 150.437088
## iter 90 value 150.131533
## iter 100 value 149.914370
## final value 149.914370
## stopped after 100 iterations
## # weights: 71
## initial value 399.719099
## iter 10 value 213.825096
## iter 20 value 187.561620
## iter 30 value 166.158151
## iter 40 value 155.278384
## iter 50 value 150.671629
## iter 60 value 147.717810
## iter 70 value 141.318894
## iter 80 value 137.183840
## iter 90 value 134.409277
## iter 100 value 133.908647
## final value 133.908647
## stopped after 100 iterations
## # weights: 91
## initial value 370.387931
## iter 10 value 210.539255
```

```
## iter 20 value 187.609416
## iter 30 value 158.545821
## iter 40 value 134.139925
## iter 50 value 119.207514
## iter 60 value 108.023132
## iter 70 value 97.555186
## iter 80 value 92.409221
## iter 90 value 89.485291
## iter 100 value 86.770843
## final value 86.770843
## stopped after 100 iterations
## # weights: 11
## initial value 348.825693
## iter 10 value 232.764145
## iter 20 value 225.394398
## iter 30 value 223.870453
## iter 40 value 223.766957
## final value 223.766951
## converged
## # weights: 31
## initial value 327.617752
## iter 10 value 224.960529
## iter 20 value 205.554779
## iter 30 value 199.882190
## iter 40 value 193.748717
## iter 50 value 189.792213
## iter 60 value 188.158502
## iter 70 value 187.715319
## iter 80 value 187.435406
## iter 90 value 187.129380
## iter 100 value 186.378481
## final value 186.378481
## stopped after 100 iterations
## # weights: 51
## initial value 357.399843
## iter 10 value 216.461679
## iter 20 value 198.414839
## iter 30 value 181.689779
## iter 40 value 178.055729
## iter 50 value 174.570161
## iter 60 value 167.709951
## iter 70 value 160.912376
## iter 80 value 152.335111
## iter 90 value 151.707262
## iter 100 value 151.655136
## final value 151.655136
## stopped after 100 iterations
## # weights: 71
## initial value 356.192422
## iter 10 value 215.168658
## iter 20 value 188.475097
## iter 30 value 169.794939
## iter 40 value 162.458455
## iter 50 value 158.174667
```

```
## iter 60 value 147.145939
## iter 70 value 139.764477
## iter 80 value 133.460868
## iter 90 value 129.418583
## iter 100 value 127.877718
## final value 127.877718
## stopped after 100 iterations
## # weights: 91
## initial value 471.143338
## iter 10 value 217.104938
## iter 20 value 183.668942
## iter 30 value 154.292522
## iter 40 value 141.198938
## iter 50 value 131.381739
## iter 60 value 121.757581
## iter 70 value 114.842757
## iter 80 value 109.435465
## iter 90 value 101.878698
## iter 100 value 99.289412
## final value 99.289412
## stopped after 100 iterations
## # weights: 11
## initial value 370.648130
## iter 10 value 242.444349
## iter 20 value 228.253167
## iter 30 value 227.975489
## final value 227.975112
## converged
## # weights: 31
## initial value 483.790902
## iter 10 value 233.642888
## iter 20 value 213.637188
## iter 30 value 209.538968
## iter 40 value 208.816698
## iter 50 value 208.709012
## iter 60 value 208.642453
## final value 208.642413
## converged
## # weights: 51
## initial value 454.325122
## iter 10 value 230.389851
## iter 20 value 210.110941
## iter 30 value 202.565814
## iter 40 value 197.920016
## iter 50 value 195.461655
## iter 60 value 193.795504
## iter 70 value 192.767835
## iter 80 value 191.995816
## iter 90 value 191.918273
## iter 100 value 191.903463
## final value 191.903463
## stopped after 100 iterations
## # weights: 71
## initial value 330.170291
```

```
## iter 10 value 226.752409
## iter 20 value 207.830088
## iter 30 value 199.283394
## iter 40 value 195.876598
## iter 50 value 193.323542
## iter 60 value 191.543338
## iter 70 value 191.062428
## iter 80 value 191.001117
## iter 90 value 190.062455
## iter 100 value 187.819802
## final value 187.819802
## stopped after 100 iterations
## # weights: 91
## initial value 351.930107
## iter 10 value 217.333955
## iter 20 value 200.784454
## iter 30 value 189.917416
## iter 40 value 183.921670
## iter 50 value 180.894234
## iter 60 value 180.191442
## iter 70 value 179.619630
## iter 80 value 178.937193
## iter 90 value 178.714181
## iter 100 value 178.633847
## final value 178.633847
## stopped after 100 iterations
## # weights: 11
## initial value 310.692834
## iter 10 value 233.363106
## iter 20 value 225.687897
## iter 30 value 224.261967
## final value 224.185410
## converged
## # weights: 31
## initial value 323.469637
## iter 10 value 220.255227
## iter 20 value 209.589070
## iter 30 value 207.110007
## iter 40 value 205.157795
## iter 50 value 203.726633
## iter 60 value 203.465816
## iter 70 value 203.423811
## final value 203.423046
## converged
## # weights: 51
## initial value 343.279153
## iter 10 value 217.986550
## iter 20 value 202.285509
## iter 30 value 193.983760
## iter 40 value 191.122582
## iter 50 value 187.670299
## iter 60 value 185.067015
## iter 70 value 184.804383
## iter 80 value 184.508242
```

```
## iter 90 value 184.404683
## iter 100 value 184.392447
## final value 184.392447
## stopped after 100 iterations
## # weights: 71
## initial value 387.994251
## iter 10 value 214.197391
## iter 20 value 185.757285
## iter 30 value 175.759773
## iter 40 value 171.775068
## iter 50 value 168.582092
## iter 60 value 166.599020
## iter 70 value 165.489293
## iter 80 value 164.452021
## iter 90 value 163.977969
## iter 100 value 163.071162
## final value 163.071162
## stopped after 100 iterations
## # weights: 91
## initial value 308.848769
## iter 10 value 212.177327
## iter 20 value 186.166583
## iter 30 value 169.462619
## iter 40 value 159.926769
## iter 50 value 153.472941
## iter 60 value 150.452846
## iter 70 value 148.740763
## iter 80 value 145.206612
## iter 90 value 141.999128
## iter 100 value 139.547629
## final value 139.547629
## stopped after 100 iterations
## # weights: 11
## initial value 328.167142
## iter 10 value 234.302924
## iter 20 value 227.564164
## iter 30 value 223.928200
## iter 40 value 223.811097
## iter 50 value 223.810688
## iter 50 value 223.810687
## iter 50 value 223.810687
## final value 223.810687
## converged
## # weights: 31
## initial value 353.449264
## iter 10 value 223.319471
## iter 20 value 203.309499
## iter 30 value 197.938033
## iter 40 value 193.914927
## iter 50 value 192.766220
## iter 60 value 192.037315
## iter 70 value 191.482998
## iter 80 value 191.231058
## iter 90 value 191.017710
```



```
## iter 100 value 190.975983
## final value 190.975983
## stopped after 100 iterations
## # weights: 51
## initial value 285.414192
## iter 10 value 215.723085
## iter 20 value 190.434651
## iter 30 value 180.146920
## iter 40 value 177.996532
## iter 50 value 175.838539
## iter 60 value 174.677409
## iter 70 value 173.368103
## iter 80 value 170.104266
## iter 90 value 169.717053
## iter 100 value 169.405616
## final value 169.405616
## stopped after 100 iterations
## # weights: 71
## initial value 312.364384
## iter 10 value 207.609675
## iter 20 value 183.418987
## iter 30 value 173.361866
## iter 40 value 169.063798
## iter 50 value 163.855251
## iter 60 value 161.591360
## iter 70 value 161.007092
## iter 80 value 160.363665
## iter 90 value 160.251083
## iter 100 value 160.096940
## final value 160.096940
## stopped after 100 iterations
## # weights: 91
## initial value 436.640407
## iter 10 value 214.182124
## iter 20 value 180.760721
## iter 30 value 159.309775
## iter 40 value 143.829896
## iter 50 value 128.549457
## iter 60 value 119.296320
## iter 70 value 117.379718
## iter 80 value 116.719676
## iter 90 value 116.377082
## iter 100 value 115.548381
## final value 115.548381
## stopped after 100 iterations
## # weights: 11
## initial value 357.044464
## iter 10 value 281.460194
## iter 20 value 228.467027
## iter 30 value 223.977942
## iter 40 value 223.771353
## final value 223.771348
## converged
## # weights: 31
```

```
## initial value 355.883291
## iter 10 value 212.127211
## iter 20 value 201.269135
## iter 30 value 195.988137
## iter 40 value 189.877031
## iter 50 value 188.176867
## iter 60 value 187.829678
## iter 70 value 187.587469
## iter 80 value 187.435379
## iter 90 value 186.932676
## iter 100 value 186.807049
## final value 186.807049
## stopped after 100 iterations
## # weights: 51
## initial value 315.533127
## iter 10 value 211.734920
## iter 20 value 188.019424
## iter 30 value 183.632554
## iter 40 value 178.117307
## iter 50 value 173.184124
## iter 60 value 170.041906
## iter 70 value 167.666043
## iter 80 value 167.339026
## iter 90 value 167.201366
## iter 100 value 167.157112
## final value 167.157112
## stopped after 100 iterations
## # weights: 71
## initial value 338.032701
## iter 10 value 214.009503
## iter 20 value 174.124290
## iter 30 value 154.734935
## iter 40 value 139.350144
## iter 50 value 134.136441
## iter 60 value 129.156243
## iter 70 value 127.994904
## iter 80 value 124.989914
## iter 90 value 123.743469
## iter 100 value 122.339655
## final value 122.339655
## stopped after 100 iterations
## # weights: 91
## initial value 437.402161
## iter 10 value 214.210476
## iter 20 value 176.413066
## iter 30 value 135.287853
## iter 40 value 119.806148
## iter 50 value 111.151656
## iter 60 value 106.191712
## iter 70 value 103.111529
## iter 80 value 101.713846
## iter 90 value 101.413371
## iter 100 value 101.341562
## final value 101.341562
```

```
## stopped after 100 iterations
## # weights:  11
## initial  value 323.810853
## iter   10 value 224.277968
## iter   20 value 215.747030
## iter   30 value 212.348164
## iter   40 value 211.551220
## iter   50 value 211.423988
## iter   60 value 211.417292
## iter   70 value 211.395571
## final  value 211.395566
## converged
## # weights:  31
## initial  value 347.937901
## iter   10 value 212.388549
## iter   20 value 191.814432
## iter   30 value 188.815361
## iter   40 value 186.578370
## iter   50 value 184.071903
## iter   60 value 180.226668
## iter   70 value 179.094534
## iter   80 value 178.463009
## iter   90 value 178.179892
## iter  100 value 178.026065
## final  value 178.026065
## stopped after 100 iterations
## # weights:  51
## initial  value 333.725348
## iter   10 value 196.088123
## iter   20 value 175.714822
## iter   30 value 168.888442
## iter   40 value 151.442802
## iter   50 value 146.514596
## iter   60 value 145.903789
## iter   70 value 145.898541
## final  value 145.898535
## converged
## # weights:  71
## initial  value 343.755191
## iter   10 value 199.441599
## iter   20 value 173.105377
## iter   30 value 142.288711
## iter   40 value 128.218720
## iter   50 value 117.780594
## iter   60 value 112.639349
## iter   70 value 109.490170
## iter   80 value 108.647892
## iter   90 value 108.001172
## iter  100 value 107.176858
## final  value 107.176858
## stopped after 100 iterations
## # weights:  91
## initial  value 321.610571
## iter   10 value 195.723170
```

```
## iter 20 value 170.306305
## iter 30 value 147.006633
## iter 40 value 132.993807
## iter 50 value 121.963232
## iter 60 value 110.800666
## iter 70 value 101.876878
## iter 80 value 96.843521
## iter 90 value 96.354366
## iter 100 value 96.326321
## final value 96.326321
## stopped after 100 iterations
## # weights: 11
## initial value 337.126195
## iter 10 value 228.987865
## iter 20 value 218.331319
## iter 30 value 216.013861
## iter 40 value 215.739545
## iter 40 value 215.739544
## iter 40 value 215.739544
## final value 215.739544
## converged
## # weights: 31
## initial value 357.143120
## iter 10 value 214.717581
## iter 20 value 206.614482
## iter 30 value 199.825033
## iter 40 value 196.950441
## iter 50 value 195.605717
## iter 60 value 195.562541
## iter 70 value 195.562174
## final value 195.562158
## converged
## # weights: 51
## initial value 385.125958
## iter 10 value 209.461135
## iter 20 value 199.095962
## iter 30 value 191.859444
## iter 40 value 188.878305
## iter 50 value 187.641528
## iter 60 value 187.439660
## iter 70 value 187.382721
## iter 80 value 187.376343
## final value 187.376203
## converged
## # weights: 71
## initial value 340.934815
## iter 10 value 222.201480
## iter 20 value 199.887375
## iter 30 value 187.028318
## iter 40 value 185.042103
## iter 50 value 183.059190
## iter 60 value 182.587805
## iter 70 value 180.876250
## iter 80 value 179.712155
```

```
## iter 90 value 179.167058
## iter 100 value 178.341629
## final value 178.341629
## stopped after 100 iterations
## # weights: 91
## initial value 312.449239
## iter 10 value 202.419501
## iter 20 value 189.898753
## iter 30 value 178.910517
## iter 40 value 172.343091
## iter 50 value 169.431948
## iter 60 value 166.795981
## iter 70 value 165.192504
## iter 80 value 163.936791
## iter 90 value 163.717689
## iter 100 value 163.609704
## final value 163.609704
## stopped after 100 iterations
## # weights: 11
## initial value 390.067408
## iter 10 value 215.240397
## iter 20 value 212.488856
## iter 30 value 212.407286
## final value 212.396891
## converged
## # weights: 31
## initial value 350.854243
## iter 10 value 203.370451
## iter 20 value 191.581086
## iter 30 value 188.899174
## iter 40 value 187.781971
## iter 50 value 187.599003
## iter 60 value 187.496759
## iter 70 value 187.454946
## iter 80 value 187.451004
## iter 90 value 187.448438
## iter 100 value 187.448147
## final value 187.448147
## stopped after 100 iterations
## # weights: 51
## initial value 325.592247
## iter 10 value 205.401651
## iter 20 value 186.803969
## iter 30 value 176.757768
## iter 40 value 173.474846
## iter 50 value 172.677982
## iter 60 value 172.554329
## iter 70 value 172.493399
## iter 80 value 172.472011
## iter 90 value 172.445914
## iter 100 value 172.264160
## final value 172.264160
## stopped after 100 iterations
## # weights: 71
```

```
## initial value 347.178341
## iter 10 value 210.341752
## iter 20 value 177.985272
## iter 30 value 161.968779
## iter 40 value 155.574191
## iter 50 value 152.422083
## iter 60 value 151.098085
## iter 70 value 150.351159
## iter 80 value 149.891685
## iter 90 value 149.304734
## iter 100 value 148.766593
## final value 148.766593
## stopped after 100 iterations
## # weights: 91
## initial value 541.570620
## iter 10 value 202.745664
## iter 20 value 182.171321
## iter 30 value 156.422786
## iter 40 value 141.699394
## iter 50 value 133.104193
## iter 60 value 120.739998
## iter 70 value 112.779394
## iter 80 value 109.267702
## iter 90 value 107.984519
## iter 100 value 106.995316
## final value 106.995316
## stopped after 100 iterations
## # weights: 11
## initial value 310.764777
## iter 10 value 223.450284
## iter 20 value 215.880663
## iter 30 value 212.654427
## iter 40 value 211.751894
## iter 50 value 211.540406
## iter 60 value 211.530792
## final value 211.524990
## converged
## # weights: 31
## initial value 329.851232
## iter 10 value 202.261846
## iter 20 value 188.241589
## iter 30 value 184.865784
## iter 40 value 184.381195
## iter 50 value 183.442539
## iter 60 value 180.183909
## iter 70 value 180.091011
## iter 80 value 180.079139
## iter 90 value 180.061487
## iter 100 value 180.029413
## final value 180.029413
## stopped after 100 iterations
## # weights: 51
## initial value 375.783009
## iter 10 value 197.430951
```

```
## iter 20 value 173.846002
## iter 30 value 164.633280
## iter 40 value 158.081472
## iter 50 value 157.487963
## iter 60 value 157.103193
## iter 70 value 156.669840
## iter 80 value 156.193454
## iter 90 value 156.101695
## iter 100 value 156.080968
## final value 156.080968
## stopped after 100 iterations
## # weights: 71
## initial value 331.047387
## iter 10 value 202.261439
## iter 20 value 186.289721
## iter 30 value 170.026929
## iter 40 value 153.773580
## iter 50 value 146.453544
## iter 60 value 140.815996
## iter 70 value 139.748908
## iter 80 value 136.179406
## iter 90 value 132.492971
## iter 100 value 129.661454
## final value 129.661454
## stopped after 100 iterations
## # weights: 91
## initial value 333.910150
## iter 10 value 196.596915
## iter 20 value 158.987373
## iter 30 value 124.338707
## iter 40 value 105.747699
## iter 50 value 98.213969
## iter 60 value 96.711544
## iter 70 value 94.649836
## iter 80 value 92.492026
## iter 90 value 91.705134
## iter 100 value 91.363603
## final value 91.363603
## stopped after 100 iterations
## # weights: 11
## initial value 322.816917
## iter 10 value 214.896122
## iter 20 value 212.081351
## iter 30 value 211.748524
## iter 40 value 211.491717
## iter 50 value 211.429114
## iter 60 value 211.427938
## final value 211.421823
## converged
## # weights: 31
## initial value 325.344623
## iter 10 value 203.038471
## iter 20 value 194.068251
## iter 30 value 186.286888
```

```
## iter 40 value 184.943505
## iter 50 value 183.287157
## iter 60 value 181.966429
## iter 70 value 180.798986
## iter 80 value 180.124651
## iter 90 value 179.864087
## iter 100 value 178.665868
## final value 178.665868
## stopped after 100 iterations
## # weights: 51
## initial value 445.093951
## iter 10 value 211.608660
## iter 20 value 179.491154
## iter 30 value 171.079107
## iter 40 value 164.228141
## iter 50 value 160.035527
## iter 60 value 158.831128
## iter 70 value 158.500995
## iter 80 value 158.406894
## iter 90 value 158.171516
## iter 100 value 157.917598
## final value 157.917598
## stopped after 100 iterations
## # weights: 71
## initial value 316.211543
## iter 10 value 204.563804
## iter 20 value 184.032790
## iter 30 value 168.190632
## iter 40 value 147.600373
## iter 50 value 133.771538
## iter 60 value 125.064045
## iter 70 value 123.084093
## iter 80 value 120.281001
## iter 90 value 119.120778
## iter 100 value 118.733837
## final value 118.733837
## stopped after 100 iterations
## # weights: 91
## initial value 357.456145
## iter 10 value 196.547219
## iter 20 value 155.582330
## iter 30 value 126.590946
## iter 40 value 104.892732
## iter 50 value 97.179267
## iter 60 value 92.767865
## iter 70 value 90.203635
## iter 80 value 89.567385
## iter 90 value 89.151704
## iter 100 value 89.036788
## final value 89.036788
## stopped after 100 iterations
## # weights: 11
## initial value 354.383684
## iter 10 value 231.262165
```



```
## iter 20 value 226.710243
## iter 30 value 219.151009
## iter 40 value 218.798264
## final value 218.798104
## converged
## # weights: 31
## initial value 334.274717
## iter 10 value 220.722849
## iter 20 value 201.798155
## iter 30 value 199.935659
## iter 40 value 195.136477
## iter 50 value 184.691284
## iter 60 value 182.017524
## iter 70 value 181.845131
## iter 80 value 181.815484
## iter 90 value 181.784653
## iter 100 value 181.673337
## final value 181.673337
## stopped after 100 iterations
## # weights: 51
## initial value 305.898758
## iter 10 value 220.533944
## iter 20 value 201.429468
## iter 30 value 183.920931
## iter 40 value 174.900886
## iter 50 value 170.460921
## iter 60 value 161.784645
## iter 70 value 153.919838
## iter 80 value 153.425249
## iter 90 value 153.413755
## final value 153.413744
## converged
## # weights: 71
## initial value 344.880633
## iter 10 value 205.782674
## iter 20 value 177.247140
## iter 30 value 157.360613
## iter 40 value 144.346366
## iter 50 value 129.524179
## iter 60 value 126.785687
## iter 70 value 126.679716
## final value 126.678736
## converged
## # weights: 91
## initial value 529.491852
## iter 10 value 204.652538
## iter 20 value 176.171360
## iter 30 value 152.486756
## iter 40 value 134.768066
## iter 50 value 123.906545
## iter 60 value 115.631314
## iter 70 value 109.609384
## iter 80 value 102.512824
## iter 90 value 98.790274
```

```
## iter 100 value 94.913212
## final value 94.913212
## stopped after 100 iterations
## # weights: 11
## initial value 317.066967
## iter 10 value 240.576769
## iter 20 value 225.282007
## iter 30 value 222.208812
## final value 222.110996
## converged
## # weights: 31
## initial value 454.691108
## iter 10 value 233.378725
## iter 20 value 213.671333
## iter 30 value 208.257165
## iter 40 value 204.863087
## iter 50 value 203.390835
## iter 60 value 203.302011
## final value 203.301510
## converged
## # weights: 51
## initial value 342.356971
## iter 10 value 229.393188
## iter 20 value 211.941588
## iter 30 value 202.565749
## iter 40 value 194.693122
## iter 50 value 193.551568
## iter 60 value 193.304043
## iter 70 value 193.235001
## iter 80 value 193.224168
## final value 193.224102
## converged
## # weights: 71
## initial value 368.133200
## iter 10 value 234.448478
## iter 20 value 218.121260
## iter 30 value 203.910429
## iter 40 value 199.172147
## iter 50 value 196.883726
## iter 60 value 195.856608
## iter 70 value 194.703029
## iter 80 value 194.279224
## iter 90 value 193.970060
## iter 100 value 193.905221
## final value 193.905221
## stopped after 100 iterations
## # weights: 91
## initial value 324.021911
## iter 10 value 222.111494
## iter 20 value 206.157004
## iter 30 value 191.096854
## iter 40 value 183.776643
## iter 50 value 181.534906
## iter 60 value 180.573344
```

```
## iter 70 value 179.628807
## iter 80 value 178.444307
## iter 90 value 176.564296
## iter 100 value 175.647380
## final value 175.647380
## stopped after 100 iterations
## # weights: 11
## initial value 318.751249
## iter 10 value 220.059939
## iter 20 value 219.335622
## iter 30 value 219.288018
## final value 219.287044
## converged
## # weights: 31
## initial value 345.152885
## iter 10 value 220.848250
## iter 20 value 201.797592
## iter 30 value 197.205222
## iter 40 value 195.271012
## iter 50 value 193.261847
## iter 60 value 193.086783
## iter 70 value 193.033731
## iter 80 value 193.033165
## final value 193.033116
## converged
## # weights: 51
## initial value 483.064300
## iter 10 value 217.102818
## iter 20 value 185.763434
## iter 30 value 170.653109
## iter 40 value 168.595042
## iter 50 value 167.458493
## iter 60 value 166.659163
## iter 70 value 165.741497
## iter 80 value 165.446316
## iter 90 value 165.425135
## iter 100 value 165.424335
## final value 165.424335
## stopped after 100 iterations
## # weights: 71
## initial value 317.473807
## iter 10 value 212.250218
## iter 20 value 195.488848
## iter 30 value 182.700405
## iter 40 value 172.831227
## iter 50 value 168.909501
## iter 60 value 167.332177
## iter 70 value 167.170173
## iter 80 value 167.137845
## iter 90 value 167.133164
## iter 100 value 167.132587
## final value 167.132587
## stopped after 100 iterations
## # weights: 91
```

```
## initial value 374.440993
## iter 10 value 212.490273
## iter 20 value 173.870948
## iter 30 value 149.841023
## iter 40 value 142.383165
## iter 50 value 139.051045
## iter 60 value 138.092328
## iter 70 value 135.936850
## iter 80 value 135.144147
## iter 90 value 134.896077
## iter 100 value 134.802281
## final value 134.802281
## stopped after 100 iterations
## # weights: 11
## initial value 417.752067
## iter 10 value 226.118070
## iter 20 value 218.898734
## iter 30 value 218.854523
## final value 218.849001
## converged
## # weights: 31
## initial value 369.975414
## iter 10 value 207.273395
## iter 20 value 200.368331
## iter 30 value 196.826762
## iter 40 value 194.078064
## iter 50 value 191.711112
## iter 60 value 190.256933
## iter 70 value 190.117622
## iter 80 value 190.052462
## iter 90 value 189.927502
## iter 100 value 189.922178
## final value 189.922178
## stopped after 100 iterations
## # weights: 51
## initial value 344.111857
## iter 10 value 212.593569
## iter 20 value 191.704913
## iter 30 value 179.063029
## iter 40 value 170.548555
## iter 50 value 168.967170
## iter 60 value 168.793957
## iter 70 value 168.568885
## iter 80 value 168.500477
## iter 90 value 168.464766
## iter 100 value 168.453097
## final value 168.453097
## stopped after 100 iterations
## # weights: 71
## initial value 368.314876
## iter 10 value 211.661718
## iter 20 value 186.929058
## iter 30 value 173.755759
## iter 40 value 156.948002
```

```
## iter 50 value 152.954730
## iter 60 value 150.817433
## iter 70 value 150.108839
## iter 80 value 149.681211
## iter 90 value 149.254957
## iter 100 value 148.758982
## final value 148.758982
## stopped after 100 iterations
## # weights: 91
## initial value 332.926469
## iter 10 value 208.395238
## iter 20 value 176.568150
## iter 30 value 150.370566
## iter 40 value 139.664959
## iter 50 value 136.077922
## iter 60 value 132.932066
## iter 70 value 130.672196
## iter 80 value 129.436974
## iter 90 value 129.148986
## iter 100 value 128.911321
## final value 128.911321
## stopped after 100 iterations
## # weights: 11
## initial value 370.975825
## iter 10 value 235.743122
## iter 20 value 231.238006
## iter 30 value 231.054913
## iter 40 value 229.380697
## iter 50 value 229.292748
## final value 229.292377
## converged
## # weights: 31
## initial value 334.284667
## iter 10 value 213.569987
## iter 20 value 208.876103
## iter 30 value 202.242642
## iter 40 value 195.223259
## iter 50 value 191.274529
## iter 60 value 190.685146
## iter 70 value 190.583435
## iter 80 value 190.495775
## iter 90 value 190.453227
## iter 100 value 190.442504
## final value 190.442504
## stopped after 100 iterations
## # weights: 51
## initial value 384.254762
## iter 10 value 217.060691
## iter 20 value 199.491615
## iter 30 value 184.558703
## iter 40 value 175.619577
## iter 50 value 172.528023
## iter 60 value 166.968975
## iter 70 value 162.891828
```

```
## iter 80 value 161.675523
## iter 90 value 161.421895
## iter 100 value 161.295214
## final value 161.295214
## stopped after 100 iterations
## # weights: 71
## initial value 375.689946
## iter 10 value 211.719715
## iter 20 value 178.767829
## iter 30 value 149.569944
## iter 40 value 138.905757
## iter 50 value 131.304901
## iter 60 value 126.930546
## iter 70 value 124.202555
## iter 80 value 123.671661
## iter 90 value 123.539189
## iter 100 value 123.411836
## final value 123.411836
## stopped after 100 iterations
## # weights: 91
## initial value 337.503143
## iter 10 value 206.867393
## iter 20 value 180.125418
## iter 30 value 150.036340
## iter 40 value 131.775378
## iter 50 value 123.323292
## iter 60 value 115.460257
## iter 70 value 109.517189
## iter 80 value 104.095276
## iter 90 value 97.765220
## iter 100 value 95.598611
## final value 95.598611
## stopped after 100 iterations
## # weights: 11
## initial value 416.662712
## iter 10 value 224.394884
## iter 20 value 215.680564
## iter 30 value 214.193389
## iter 40 value 213.835425
## final value 213.835422
## converged
## # weights: 31
## initial value 465.638753
## iter 10 value 210.779845
## iter 20 value 199.810506
## iter 30 value 194.083649
## iter 40 value 191.164833
## iter 50 value 188.005824
## iter 60 value 186.347169
## iter 70 value 184.527139
## iter 80 value 183.465556
## iter 90 value 182.601327
## iter 100 value 181.088397
## final value 181.088397
```

```
## stopped after 100 iterations
## # weights:  51
## initial  value 320.507328
## iter   10 value 212.632309
## iter   20 value 196.833271
## iter   30 value 183.699208
## iter   40 value 176.855273
## iter   50 value 163.667176
## iter   60 value 152.114861
## iter   70 value 145.902803
## iter   80 value 145.638610
## iter   90 value 145.591351
## final   value 145.590687
## converged
## # weights:  71
## initial  value 323.252051
## iter   10 value 203.677735
## iter   20 value 178.627297
## iter   30 value 165.389709
## iter   40 value 148.742428
## iter   50 value 138.740881
## iter   60 value 132.817513
## iter   70 value 126.385659
## iter   80 value 121.604407
## iter   90 value 120.974240
## iter  100 value 120.965422
## final   value 120.965422
## stopped after 100 iterations
## # weights:  91
## initial  value 504.392053
## iter   10 value 202.337061
## iter   20 value 173.537195
## iter   30 value 139.883891
## iter   40 value 120.438022
## iter   50 value 107.709779
## iter   60 value 104.250759
## iter   70 value 99.654965
## iter   80 value 90.162974
## iter   90 value 89.091427
## iter  100 value 88.676930
## final   value 88.676930
## stopped after 100 iterations
## # weights:  11
## initial  value 398.125354
## iter   10 value 225.386446
## iter   20 value 217.630747
## iter   30 value 217.409262
## final   value 217.401165
## converged
## # weights:  31
## initial  value 322.471360
## iter   10 value 223.223907
## iter   20 value 207.924292
## iter   30 value 206.034459
```

```
## iter 40 value 205.789259
## iter 50 value 205.683589
## iter 60 value 205.672643
## final value 205.672617
## converged
## # weights: 51
## initial value 448.122900
## iter 10 value 216.556061
## iter 20 value 196.104550
## iter 30 value 189.957807
## iter 40 value 188.197901
## iter 50 value 186.837916
## iter 60 value 186.118220
## iter 70 value 185.861164
## iter 80 value 185.472176
## iter 90 value 185.394741
## iter 100 value 185.391234
## final value 185.391234
## stopped after 100 iterations
## # weights: 71
## initial value 639.136516
## iter 10 value 236.115095
## iter 20 value 200.543991
## iter 30 value 189.342835
## iter 40 value 184.979965
## iter 50 value 179.265343
## iter 60 value 175.896747
## iter 70 value 175.233517
## iter 80 value 175.118191
## iter 90 value 175.086622
## iter 100 value 175.039723
## final value 175.039723
## stopped after 100 iterations
## # weights: 91
## initial value 340.788370
## iter 10 value 218.817124
## iter 20 value 195.733141
## iter 30 value 181.767112
## iter 40 value 176.483831
## iter 50 value 173.663475
## iter 60 value 172.531117
## iter 70 value 171.343228
## iter 80 value 170.991611
## iter 90 value 170.802854
## iter 100 value 170.345538
## final value 170.345538
## stopped after 100 iterations
## # weights: 11
## initial value 450.276511
## iter 10 value 233.770620
## iter 20 value 225.112829
## iter 30 value 219.055204
## iter 40 value 214.740628
## iter 50 value 214.368587
```



```
## iter 60 value 214.367850
## iter 60 value 214.367848
## iter 60 value 214.367848
## final value 214.367848
## converged
## # weights: 31
## initial value 374.854309
## iter 10 value 214.640590
## iter 20 value 197.548518
## iter 30 value 195.329591
## iter 40 value 194.664915
## iter 50 value 193.769287
## iter 60 value 193.630984
## iter 70 value 193.519995
## iter 80 value 193.372522
## iter 90 value 193.339868
## iter 100 value 193.338016
## final value 193.338016
## stopped after 100 iterations
## # weights: 51
## initial value 542.555338
## iter 10 value 204.871175
## iter 20 value 184.629345
## iter 30 value 177.400408
## iter 40 value 175.540907
## iter 50 value 175.074900
## iter 60 value 174.685320
## iter 70 value 172.224086
## iter 80 value 170.390802
## iter 90 value 169.803227
## iter 100 value 169.635158
## final value 169.635158
## stopped after 100 iterations
## # weights: 71
## initial value 343.728245
## iter 10 value 206.953321
## iter 20 value 179.824063
## iter 30 value 163.513756
## iter 40 value 157.760940
## iter 50 value 155.323343
## iter 60 value 154.596589
## iter 70 value 153.902632
## iter 80 value 152.165083
## iter 90 value 151.862774
## iter 100 value 151.632040
## final value 151.632040
## stopped after 100 iterations
## # weights: 91
## initial value 326.884268
## iter 10 value 206.549449
## iter 20 value 167.691042
## iter 30 value 144.202903
## iter 40 value 131.801848
## iter 50 value 127.817562
```

```
## iter 60 value 125.102081
## iter 70 value 123.864979
## iter 80 value 117.575366
## iter 90 value 114.201425
## iter 100 value 112.959341
## final value 112.959341
## stopped after 100 iterations
## # weights: 11
## initial value 348.094924
## iter 10 value 219.655807
## iter 20 value 214.550905
## iter 30 value 213.879713
## iter 40 value 213.878235
## iter 40 value 213.878235
## iter 40 value 213.878235
## final value 213.878235
## converged
## # weights: 31
## initial value 324.728956
## iter 10 value 213.920297
## iter 20 value 203.141689
## iter 30 value 191.977588
## iter 40 value 188.895936
## iter 50 value 187.131336
## iter 60 value 186.100749
## iter 70 value 185.990727
## iter 80 value 185.912024
## iter 90 value 185.473126
## iter 100 value 185.470936
## final value 185.470936
## stopped after 100 iterations
## # weights: 51
## initial value 346.091095
## iter 10 value 207.501561
## iter 20 value 191.916280
## iter 30 value 177.952430
## iter 40 value 165.072822
## iter 50 value 157.907088
## iter 60 value 154.465849
## iter 70 value 153.100443
## iter 80 value 152.450991
## iter 90 value 152.241587
## iter 100 value 152.199523
## final value 152.199523
## stopped after 100 iterations
## # weights: 71
## initial value 317.947453
## iter 10 value 205.090442
## iter 20 value 179.686224
## iter 30 value 158.635667
## iter 40 value 144.611851
## iter 50 value 137.548389
## iter 60 value 134.002673
## iter 70 value 130.790496
```

```
## iter 80 value 129.752044
## iter 90 value 128.985145
## iter 100 value 128.259294
## final value 128.259294
## stopped after 100 iterations
## # weights: 91
## initial value 359.952079
## iter 10 value 199.421102
## iter 20 value 174.014759
## iter 30 value 153.403099
## iter 40 value 133.839120
## iter 50 value 127.898213
## iter 60 value 122.874933
## iter 70 value 121.208031
## iter 80 value 119.752475
## iter 90 value 118.360023
## iter 100 value 117.868073
## final value 117.868073
## stopped after 100 iterations
## # weights: 11
## initial value 341.220130
## iter 10 value 225.398390
## iter 20 value 220.075968
## iter 30 value 214.752147
## iter 40 value 213.840365
## final value 213.839718
## converged
## # weights: 31
## initial value 347.938855
## iter 10 value 213.774772
## iter 20 value 201.499362
## iter 30 value 196.010534
## iter 40 value 193.235043
## iter 50 value 188.263352
## iter 60 value 183.038669
## iter 70 value 182.864459
## iter 80 value 182.797521
## iter 90 value 182.747469
## iter 100 value 182.638200
## final value 182.638200
## stopped after 100 iterations
## # weights: 51
## initial value 372.507606
## iter 10 value 206.023817
## iter 20 value 182.349134
## iter 30 value 173.922176
## iter 40 value 169.614526
## iter 50 value 154.819009
## iter 60 value 149.013578
## iter 70 value 146.855461
## iter 80 value 145.739273
## iter 90 value 142.586589
## iter 100 value 142.264853
## final value 142.264853
```

```
## stopped after 100 iterations
## # weights:  71
## initial  value 309.604013
## iter   10 value 203.034518
## iter   20 value 169.277933
## iter   30 value 142.772992
## iter   40 value 131.655585
## iter   50 value 123.294035
## iter   60 value 117.153555
## iter   70 value 114.698867
## iter   80 value 114.435551
## iter   90 value 114.288956
## iter  100 value 114.244759
## final  value 114.244759
## stopped after 100 iterations
## # weights:  91
## initial  value 356.180863
## iter   10 value 210.099245
## iter   20 value 181.002858
## iter   30 value 156.837306
## iter   40 value 138.041696
## iter   50 value 125.959566
## iter   60 value 120.778227
## iter   70 value 115.709825
## iter   80 value 110.565766
## iter   90 value 108.270189
## iter  100 value 107.487067
## final  value 107.487067
## stopped after 100 iterations
## # weights:  11
## initial  value 313.137268
## iter   10 value 227.645202
## iter   20 value 218.887873
## iter   30 value 218.823595
## iter   40 value 218.615417
## final  value 218.615411
## converged
## # weights:  31
## initial  value 329.737793
## iter   10 value 220.695268
## iter   20 value 208.052520
## iter   30 value 200.588487
## iter   40 value 196.717376
## iter   50 value 191.897358
## iter   60 value 189.175963
## iter   70 value 187.951929
## iter   80 value 184.970447
## iter   90 value 184.803162
## iter  100 value 184.271072
## final  value 184.271072
## stopped after 100 iterations
## # weights:  51
## initial  value 335.433872
## iter   10 value 212.317336
```

```
## iter 20 value 194.546682
## iter 30 value 181.942769
## iter 40 value 172.562371
## iter 50 value 162.077092
## iter 60 value 155.588218
## iter 70 value 155.347695
## final value 155.343370
## converged
## # weights: 71
## initial value 308.112554
## iter 10 value 209.039072
## iter 20 value 175.857288
## iter 30 value 160.194381
## iter 40 value 143.776039
## iter 50 value 138.882162
## iter 60 value 128.616065
## iter 70 value 123.524486
## iter 80 value 122.963672
## iter 90 value 122.959574
## iter 100 value 122.958642
## final value 122.958642
## stopped after 100 iterations
## # weights: 91
## initial value 512.034912
## iter 10 value 203.007423
## iter 20 value 174.378176
## iter 30 value 152.907047
## iter 40 value 136.312987
## iter 50 value 122.922991
## iter 60 value 118.356469
## iter 70 value 113.000378
## iter 80 value 110.779686
## iter 90 value 107.449179
## iter 100 value 103.929033
## final value 103.929033
## stopped after 100 iterations
## # weights: 11
## initial value 411.039169
## iter 10 value 237.428063
## iter 20 value 229.014857
## iter 30 value 222.061678
## final value 221.914845
## converged
## # weights: 31
## initial value 466.931109
## iter 10 value 240.301338
## iter 20 value 215.414090
## iter 30 value 211.320477
## iter 40 value 208.829277
## iter 50 value 206.364001
## iter 60 value 206.108151
## final value 206.103918
## converged
## # weights: 51
```

```
## initial value 462.379104
## iter 10 value 223.351245
## iter 20 value 208.348162
## iter 30 value 199.613166
## iter 40 value 197.418024
## iter 50 value 197.072216
## iter 60 value 197.017426
## iter 70 value 197.014190
## final value 197.013970
## converged
## # weights: 71
## initial value 334.342809
## iter 10 value 231.211050
## iter 20 value 204.081450
## iter 30 value 194.521551
## iter 40 value 190.716510
## iter 50 value 188.060271
## iter 60 value 187.369663
## iter 70 value 185.720818
## iter 80 value 184.897799
## iter 90 value 184.225000
## iter 100 value 183.935223
## final value 183.935223
## stopped after 100 iterations
## # weights: 91
## initial value 373.986696
## iter 10 value 215.824668
## iter 20 value 198.821496
## iter 30 value 183.312357
## iter 40 value 175.319322
## iter 50 value 172.857036
## iter 60 value 171.895510
## iter 70 value 171.507986
## iter 80 value 171.413969
## iter 90 value 171.141182
## iter 100 value 170.942399
## final value 170.942399
## stopped after 100 iterations
## # weights: 11
## initial value 359.180316
## iter 10 value 226.884116
## iter 20 value 219.623984
## iter 30 value 219.135801
## final value 219.120420
## converged
## # weights: 31
## initial value 396.480482
## iter 10 value 217.721867
## iter 20 value 208.546854
## iter 30 value 205.989697
## iter 40 value 200.443280
## iter 50 value 199.083890
## iter 60 value 198.910779
## iter 70 value 198.908467
```

```
## final value 198.908425
## converged
## # weights: 51
## initial value 311.225885
## iter 10 value 210.237730
## iter 20 value 192.946952
## iter 30 value 189.847869
## iter 40 value 186.285145
## iter 50 value 184.583059
## iter 60 value 183.233567
## iter 70 value 180.657064
## iter 80 value 179.878816
## iter 90 value 179.824700
## iter 100 value 179.479954
## final value 179.479954
## stopped after 100 iterations
## # weights: 71
## initial value 570.831715
## iter 10 value 204.757328
## iter 20 value 175.177345
## iter 30 value 167.971833
## iter 40 value 163.860205
## iter 50 value 162.491121
## iter 60 value 161.716041
## iter 70 value 160.314324
## iter 80 value 159.840485
## iter 90 value 159.352107
## iter 100 value 157.309217
## final value 157.309217
## stopped after 100 iterations
## # weights: 91
## initial value 318.804558
## iter 10 value 207.372854
## iter 20 value 181.650946
## iter 30 value 165.201035
## iter 40 value 157.638810
## iter 50 value 150.830042
## iter 60 value 149.230687
## iter 70 value 148.637777
## iter 80 value 148.295157
## iter 90 value 148.149584
## iter 100 value 146.971287
## final value 146.971287
## stopped after 100 iterations
## # weights: 11
## initial value 346.616403
## iter 10 value 231.057989
## iter 20 value 225.121998
## iter 30 value 219.957395
## iter 40 value 218.686035
## final value 218.654091
## converged
## # weights: 31
## initial value 368.973344
```

```
## iter 10 value 236.848227
## iter 20 value 208.279674
## iter 30 value 200.629899
## iter 40 value 195.271268
## iter 50 value 194.718728
## iter 60 value 194.647284
## iter 70 value 194.594451
## iter 80 value 194.556523
## iter 90 value 194.543615
## iter 100 value 194.539483
## final value 194.539483
## stopped after 100 iterations
## # weights: 51
## initial value 347.687019
## iter 10 value 211.967523
## iter 20 value 189.401788
## iter 30 value 180.627016
## iter 40 value 172.196340
## iter 50 value 166.755314
## iter 60 value 165.525440
## iter 70 value 165.212486
## iter 80 value 164.695202
## iter 90 value 164.526844
## iter 100 value 164.488575
## final value 164.488575
## stopped after 100 iterations
## # weights: 71
## initial value 409.314880
## iter 10 value 221.230545
## iter 20 value 205.031649
## iter 30 value 175.279921
## iter 40 value 160.330525
## iter 50 value 152.621810
## iter 60 value 149.148006
## iter 70 value 146.683792
## iter 80 value 141.583398
## iter 90 value 140.053434
## iter 100 value 138.517150
## final value 138.517150
## stopped after 100 iterations
## # weights: 91
## initial value 373.857490
## iter 10 value 204.887416
## iter 20 value 172.360597
## iter 30 value 140.833994
## iter 40 value 126.714929
## iter 50 value 115.356414
## iter 60 value 109.596669
## iter 70 value 102.239150
## iter 80 value 99.825728
## iter 90 value 97.391618
## iter 100 value 96.476395
## final value 96.476395
## stopped after 100 iterations
```



```
## # weights: 11
## initial value 395.333083
## iter 10 value 229.709731
## iter 20 value 222.022719
## iter 30 value 219.061563
## iter 40 value 218.627633
## final value 218.620690
## converged
## # weights: 31
## initial value 328.966463
## iter 10 value 219.388408
## iter 20 value 208.765336
## iter 30 value 200.884575
## iter 40 value 197.274087
## iter 50 value 194.123979
## iter 60 value 194.031097
## iter 70 value 193.973734
## iter 80 value 191.215738
## iter 90 value 188.977777
## iter 100 value 188.239745
## final value 188.239745
## stopped after 100 iterations
## # weights: 51
## initial value 308.268656
## iter 10 value 208.736439
## iter 20 value 195.907864
## iter 30 value 180.215182
## iter 40 value 170.743451
## iter 50 value 162.484717
## iter 60 value 159.852940
## iter 70 value 159.302839
## iter 80 value 159.050684
## iter 90 value 158.489286
## iter 100 value 158.132628
## final value 158.132628
## stopped after 100 iterations
## # weights: 71
## initial value 374.358524
## iter 10 value 210.276503
## iter 20 value 180.892358
## iter 30 value 157.027803
## iter 40 value 149.828076
## iter 50 value 142.689137
## iter 60 value 138.898832
## iter 70 value 138.005872
## iter 80 value 137.461698
## iter 90 value 137.231709
## iter 100 value 137.060524
## final value 137.060524
## stopped after 100 iterations
## # weights: 91
## initial value 331.858413
## iter 10 value 212.431532
## iter 20 value 194.747488
```

```
## iter 30 value 158.293824
## iter 40 value 141.078671
## iter 50 value 125.493664
## iter 60 value 118.649989
## iter 70 value 111.800847
## iter 80 value 107.777000
## iter 90 value 106.074332
## iter 100 value 105.389429
## final value 105.389429
## stopped after 100 iterations
## # weights: 11
## initial value 346.314115
## iter 10 value 229.733849
## iter 20 value 227.108718
## iter 30 value 221.731964
## iter 40 value 218.491933
## iter 50 value 218.108192
## iter 60 value 218.086193
## final value 218.081708
## converged
## # weights: 31
## initial value 368.739934
## iter 10 value 229.675295
## iter 20 value 205.693454
## iter 30 value 198.802757
## iter 40 value 193.770998
## iter 50 value 187.285932
## iter 60 value 184.943583
## iter 70 value 184.824751
## iter 80 value 184.812988
## iter 90 value 184.807103
## iter 90 value 184.807101
## iter 90 value 184.807101
## final value 184.807101
## converged
## # weights: 51
## initial value 424.894845
## iter 10 value 223.815324
## iter 20 value 196.009774
## iter 30 value 183.279097
## iter 40 value 172.995680
## iter 50 value 164.944568
## iter 60 value 156.563870
## iter 70 value 155.238295
## iter 80 value 152.586534
## iter 90 value 152.316100
## iter 100 value 152.298617
## final value 152.298617
## stopped after 100 iterations
## # weights: 71
## initial value 396.682250
## iter 10 value 207.015516
## iter 20 value 177.355742
## iter 30 value 163.258078
```

```
## iter 40 value 145.804243
## iter 50 value 138.828552
## iter 60 value 130.942929
## iter 70 value 127.601941
## iter 80 value 127.438654
## iter 90 value 127.430444
## final value 127.429533
## converged
## # weights: 91
## initial value 344.854263
## iter 10 value 205.122727
## iter 20 value 165.036472
## iter 30 value 141.112059
## iter 40 value 119.684512
## iter 50 value 110.998289
## iter 60 value 100.653466
## iter 70 value 91.529308
## iter 80 value 89.873508
## iter 90 value 89.783310
## iter 100 value 89.781235
## final value 89.781235
## stopped after 100 iterations
## # weights: 11
## initial value 382.891092
## iter 10 value 234.417979
## iter 20 value 222.661602
## iter 30 value 222.356053
## final value 222.355954
## converged
## # weights: 31
## initial value 321.325376
## iter 10 value 222.660301
## iter 20 value 209.581461
## iter 30 value 205.236798
## iter 40 value 203.627009
## iter 50 value 203.085733
## final value 203.078892
## converged
## # weights: 51
## initial value 365.194212
## iter 10 value 226.343661
## iter 20 value 205.105569
## iter 30 value 195.954081
## iter 40 value 192.912837
## iter 50 value 189.603657
## iter 60 value 188.721921
## iter 70 value 188.594868
## iter 80 value 188.535562
## iter 90 value 188.529431
## final value 188.529371
## converged
## # weights: 71
## initial value 328.359553
## iter 10 value 214.092304
```

```
## iter 20 value 198.441145
## iter 30 value 191.156336
## iter 40 value 187.303821
## iter 50 value 183.748101
## iter 60 value 180.501590
## iter 70 value 177.435431
## iter 80 value 176.341760
## iter 90 value 176.110750
## iter 100 value 176.075685
## final value 176.075685
## stopped after 100 iterations
## # weights: 91
## initial value 374.766508
## iter 10 value 216.378901
## iter 20 value 190.181229
## iter 30 value 177.045772
## iter 40 value 171.243731
## iter 50 value 167.661121
## iter 60 value 161.857788
## iter 70 value 160.847611
## iter 80 value 160.467197
## iter 90 value 160.328246
## iter 100 value 160.293316
## final value 160.293316
## stopped after 100 iterations
## # weights: 11
## initial value 344.283069
## iter 10 value 231.184177
## iter 20 value 228.281606
## iter 30 value 221.398347
## iter 40 value 218.756280
## iter 50 value 218.729267
## final value 218.727303
## converged
## # weights: 31
## initial value 368.921870
## iter 10 value 213.306220
## iter 20 value 201.676437
## iter 30 value 196.859510
## iter 40 value 196.134914
## iter 50 value 195.620576
## iter 60 value 195.599459
## iter 70 value 195.596154
## iter 80 value 195.595056
## iter 90 value 195.594767
## final value 195.594712
## converged
## # weights: 51
## initial value 353.772530
## iter 10 value 210.420880
## iter 20 value 193.972728
## iter 30 value 177.536271
## iter 40 value 170.187523
## iter 50 value 168.412890
```

```
## iter 60 value 161.368837
## iter 70 value 159.507609
## iter 80 value 159.334345
## iter 90 value 159.296432
## iter 100 value 159.294683
## final value 159.294683
## stopped after 100 iterations
## # weights: 71
## initial value 340.397621
## iter 10 value 202.642372
## iter 20 value 175.676504
## iter 30 value 164.266866
## iter 40 value 159.877619
## iter 50 value 158.535846
## iter 60 value 156.880752
## iter 70 value 155.818853
## iter 80 value 155.459362
## iter 90 value 155.394736
## iter 100 value 155.348006
## final value 155.348006
## stopped after 100 iterations
## # weights: 91
## initial value 340.337217
## iter 10 value 208.012103
## iter 20 value 177.255594
## iter 30 value 151.755291
## iter 40 value 143.706598
## iter 50 value 133.953963
## iter 60 value 129.928919
## iter 70 value 128.939543
## iter 80 value 128.145680
## iter 90 value 127.541931
## iter 100 value 127.254058
## final value 127.254058
## stopped after 100 iterations
## # weights: 11
## initial value 382.238877
## iter 10 value 230.172951
## iter 20 value 226.370592
## iter 30 value 220.078088
## iter 40 value 218.286457
## iter 50 value 218.160419
## iter 60 value 218.159222
## final value 218.158865
## converged
## # weights: 31
## initial value 332.739721
## iter 10 value 208.790771
## iter 20 value 198.216241
## iter 30 value 195.065909
## iter 40 value 192.128684
## iter 50 value 189.863974
## iter 60 value 189.506683
## iter 70 value 189.075379
```

```
## iter 80 value 189.019538
## iter 90 value 189.006664
## iter 100 value 188.993046
## final value 188.993046
## stopped after 100 iterations
## # weights: 51
## initial value 333.138442
## iter 10 value 217.300018
## iter 20 value 201.182922
## iter 30 value 190.013020
## iter 40 value 175.353763
## iter 50 value 169.225859
## iter 60 value 164.687704
## iter 70 value 162.788020
## iter 80 value 162.105725
## iter 90 value 162.060117
## iter 100 value 162.001927
## final value 162.001927
## stopped after 100 iterations
## # weights: 71
## initial value 301.185036
## iter 10 value 206.387963
## iter 20 value 171.872514
## iter 30 value 153.807328
## iter 40 value 144.621542
## iter 50 value 137.339605
## iter 60 value 134.491416
## iter 70 value 133.934303
## iter 80 value 133.696178
## iter 90 value 133.505668
## iter 100 value 133.477326
## final value 133.477326
## stopped after 100 iterations
## # weights: 91
## initial value 390.051977
## iter 10 value 210.083946
## iter 20 value 170.503357
## iter 30 value 151.548570
## iter 40 value 131.150685
## iter 50 value 121.154005
## iter 60 value 110.942283
## iter 70 value 104.722858
## iter 80 value 102.389947
## iter 90 value 101.803822
## iter 100 value 101.365304
## final value 101.365304
## stopped after 100 iterations
## # weights: 11
## initial value 374.897391
## iter 10 value 230.529567
## iter 20 value 225.271943
## iter 30 value 219.626222
## iter 40 value 218.144958
## iter 50 value 218.090286
```

```
## final value 218.090277
## converged
## # weights: 31
## initial value 396.311186
## iter 10 value 211.505575
## iter 20 value 199.226351
## iter 30 value 186.251128
## iter 40 value 183.361297
## iter 50 value 179.385697
## iter 60 value 178.617963
## iter 70 value 178.553467
## iter 80 value 178.409072
## iter 90 value 177.931320
## iter 100 value 176.907151
## final value 176.907151
## stopped after 100 iterations
## # weights: 51
## initial value 467.397545
## iter 10 value 205.734112
## iter 20 value 183.161555
## iter 30 value 175.250496
## iter 40 value 164.635627
## iter 50 value 157.047825
## iter 60 value 150.673716
## iter 70 value 150.161294
## iter 80 value 150.088982
## iter 90 value 150.017983
## iter 100 value 149.987338
## final value 149.987338
## stopped after 100 iterations
## # weights: 71
## initial value 354.371362
## iter 10 value 202.966098
## iter 20 value 164.452256
## iter 30 value 145.433553
## iter 40 value 134.558008
## iter 50 value 130.449714
## iter 60 value 124.777732
## iter 70 value 122.711204
## iter 80 value 122.415838
## iter 90 value 122.365666
## iter 100 value 122.301159
## final value 122.301159
## stopped after 100 iterations
## # weights: 91
## initial value 357.568074
## iter 10 value 200.664244
## iter 20 value 164.949177
## iter 30 value 140.567999
## iter 40 value 120.552219
## iter 50 value 113.358850
## iter 60 value 108.107616
## iter 70 value 105.661455
## iter 80 value 105.292702
```

```
## iter 90 value 105.144521
## iter 100 value 105.012017
## final value 105.012017
## stopped after 100 iterations
## # weights: 11
## initial value 333.367986
## iter 10 value 225.495896
## iter 20 value 222.704959
## iter 30 value 222.633266
## iter 40 value 222.625338
## final value 222.625315
## converged
## # weights: 31
## initial value 377.235533
## iter 10 value 213.739936
## iter 20 value 207.040534
## iter 30 value 205.590923
## iter 40 value 203.792661
## iter 50 value 201.834314
## iter 60 value 201.068413
## iter 70 value 200.169012
## iter 80 value 199.403575
## iter 90 value 197.897389
## iter 100 value 195.486357
## final value 195.486357
## stopped after 100 iterations
## # weights: 51
## initial value 339.381994
## iter 10 value 223.590919
## iter 20 value 199.986573
## iter 30 value 181.582138
## iter 40 value 170.971445
## iter 50 value 156.273952
## iter 60 value 149.253099
## iter 70 value 149.031664
## iter 80 value 149.027715
## final value 149.027696
## converged
## # weights: 71
## initial value 318.903902
## iter 10 value 218.298321
## iter 20 value 197.920779
## iter 30 value 178.864186
## iter 40 value 170.652830
## iter 50 value 158.850662
## iter 60 value 142.864983
## iter 70 value 133.124215
## iter 80 value 128.261074
## iter 90 value 124.769138
## iter 100 value 124.360137
## final value 124.360137
## stopped after 100 iterations
## # weights: 91
## initial value 325.323459
```



```
## iter 10 value 209.727187
## iter 20 value 173.506837
## iter 30 value 152.174111
## iter 40 value 137.589598
## iter 50 value 121.261084
## iter 60 value 112.542182
## iter 70 value 109.475272
## iter 80 value 109.269128
## iter 90 value 109.267502
## final value 109.267500
## converged
## # weights: 11
## initial value 310.680047
## iter 10 value 231.757752
## iter 20 value 226.824588
## iter 30 value 226.686339
## final value 226.685122
## converged
## # weights: 31
## initial value 338.056028
## iter 10 value 231.344581
## iter 20 value 215.364074
## iter 30 value 210.667204
## iter 40 value 210.054955
## iter 50 value 210.034240
## final value 210.033687
## converged
## # weights: 51
## initial value 342.159433
## iter 10 value 216.703891
## iter 20 value 207.451451
## iter 30 value 204.457874
## iter 40 value 203.625866
## iter 50 value 199.465005
## iter 60 value 197.685814
## iter 70 value 197.554425
## iter 80 value 197.525920
## final value 197.525614
## converged
## # weights: 71
## initial value 323.652105
## iter 10 value 218.254635
## iter 20 value 202.721586
## iter 30 value 197.322280
## iter 40 value 192.091847
## iter 50 value 189.540372
## iter 60 value 188.404480
## iter 70 value 187.820394
## iter 80 value 187.622464
## iter 90 value 187.466377
## iter 100 value 187.379955
## final value 187.379955
## stopped after 100 iterations
## # weights: 91
```

```
## initial value 430.060620
## iter 10 value 229.165422
## iter 20 value 203.887476
## iter 30 value 189.680257
## iter 40 value 184.882890
## iter 50 value 182.733405
## iter 60 value 181.516778
## iter 70 value 179.267952
## iter 80 value 177.858095
## iter 90 value 177.242483
## iter 100 value 176.685666
## final value 176.685666
## stopped after 100 iterations
## # weights: 11
## initial value 362.496759
## iter 10 value 225.158863
## iter 20 value 223.375764
## iter 30 value 223.189280
## final value 223.130674
## converged
## # weights: 31
## initial value 391.708563
## iter 10 value 218.766134
## iter 20 value 207.324994
## iter 30 value 203.517241
## iter 40 value 198.887774
## iter 50 value 197.857917
## iter 60 value 197.737499
## iter 70 value 197.725837
## iter 80 value 197.725042
## final value 197.724651
## converged
## # weights: 51
## initial value 367.897091
## iter 10 value 220.560451
## iter 20 value 188.562942
## iter 30 value 180.286543
## iter 40 value 178.364069
## iter 50 value 177.687732
## iter 60 value 177.497370
## iter 70 value 177.343352
## iter 80 value 177.272575
## iter 90 value 177.265350
## final value 177.265162
## converged
## # weights: 71
## initial value 374.688726
## iter 10 value 217.993862
## iter 20 value 185.103532
## iter 30 value 163.439784
## iter 40 value 157.718636
## iter 50 value 155.966366
## iter 60 value 154.356167
## iter 70 value 153.673821
```

```
## iter 80 value 153.520233
## iter 90 value 153.448223
## iter 100 value 153.426719
## final value 153.426719
## stopped after 100 iterations
## # weights: 91
## initial value 404.609860
## iter 10 value 211.120570
## iter 20 value 178.576323
## iter 30 value 161.880729
## iter 40 value 147.371666
## iter 50 value 142.120732
## iter 60 value 134.657301
## iter 70 value 128.258157
## iter 80 value 126.733093
## iter 90 value 125.080292
## iter 100 value 122.870417
## final value 122.870417
## stopped after 100 iterations
## # weights: 11
## initial value 343.196470
## iter 10 value 233.934717
## iter 20 value 232.657559
## iter 30 value 231.752491
## iter 40 value 231.605892
## iter 40 value 231.605891
## iter 40 value 231.605891
## final value 231.605891
## converged
## # weights: 31
## initial value 412.142471
## iter 10 value 226.550938
## iter 20 value 205.053181
## iter 30 value 197.667004
## iter 40 value 193.298501
## iter 50 value 191.538517
## iter 60 value 190.678527
## iter 70 value 190.407334
## iter 80 value 190.322284
## iter 90 value 190.052071
## final value 190.040037
## converged
## # weights: 51
## initial value 352.218857
## iter 10 value 211.284725
## iter 20 value 194.139660
## iter 30 value 176.785599
## iter 40 value 173.060070
## iter 50 value 169.207223
## iter 60 value 167.282039
## iter 70 value 163.768483
## iter 80 value 162.689616
## iter 90 value 162.247266
## iter 100 value 162.190416
```

```
## final value 162.190416
## stopped after 100 iterations
## # weights: 71
## initial value 300.450294
## iter 10 value 206.050873
## iter 20 value 175.848338
## iter 30 value 160.133402
## iter 40 value 156.517776
## iter 50 value 152.107706
## iter 60 value 149.583521
## iter 70 value 149.026636
## iter 80 value 148.968607
## iter 90 value 148.901160
## iter 100 value 148.816724
## final value 148.816724
## stopped after 100 iterations
## # weights: 91
## initial value 360.256573
## iter 10 value 213.201008
## iter 20 value 181.533628
## iter 30 value 153.852842
## iter 40 value 138.907145
## iter 50 value 130.351085
## iter 60 value 124.361824
## iter 70 value 121.184197
## iter 80 value 119.892094
## iter 90 value 118.996295
## iter 100 value 118.299000
## final value 118.299000
## stopped after 100 iterations
## # weights: 11
## initial value 361.963805
## iter 10 value 234.887588
## iter 20 value 233.044847
## iter 30 value 228.157142
## iter 40 value 222.930754
## iter 50 value 222.635209
## final value 222.629448
## converged
## # weights: 31
## initial value 321.758720
## iter 10 value 218.837049
## iter 20 value 198.881399
## iter 30 value 195.708343
## iter 40 value 193.030357
## iter 50 value 192.333405
## iter 60 value 191.770311
## iter 70 value 191.214992
## iter 80 value 191.090041
## iter 90 value 191.065501
## iter 100 value 191.022779
## final value 191.022779
## stopped after 100 iterations
## # weights: 51
```

```
## initial value 306.963709
## iter 10 value 219.199494
## iter 20 value 189.040196
## iter 30 value 172.459332
## iter 40 value 164.932782
## iter 50 value 158.028477
## iter 60 value 154.010660
## iter 70 value 153.866157
## iter 80 value 153.393895
## iter 90 value 153.158211
## iter 100 value 153.040163
## final value 153.040163
## stopped after 100 iterations
## # weights: 71
## initial value 396.708163
## iter 10 value 212.169175
## iter 20 value 178.457658
## iter 30 value 149.072241
## iter 40 value 135.790865
## iter 50 value 130.163455
## iter 60 value 128.908849
## iter 70 value 128.644509
## iter 80 value 128.358625
## iter 90 value 127.681575
## iter 100 value 127.480613
## final value 127.480613
## stopped after 100 iterations
## # weights: 91
## initial value 407.981099
## iter 10 value 210.299480
## iter 20 value 177.615613
## iter 30 value 143.410714
## iter 40 value 121.674991
## iter 50 value 110.594552
## iter 60 value 102.156765
## iter 70 value 98.178094
## iter 80 value 95.502542
## iter 90 value 94.183976
## iter 100 value 93.471350
## final value 93.471350
## stopped after 100 iterations
## # weights: 11
## initial value 389.973489
## iter 10 value 231.351516
## iter 20 value 228.424970
## iter 30 value 220.202771
## iter 40 value 216.320530
## final value 216.228194
## converged
## # weights: 31
## initial value 337.338523
## iter 10 value 216.102100
## iter 20 value 206.083868
## iter 30 value 195.613664
```

```
## iter 40 value 181.991696
## iter 50 value 176.988497
## iter 60 value 173.821393
## iter 70 value 173.014972
## iter 80 value 172.185515
## iter 90 value 171.992071
## iter 100 value 166.880110
## final value 166.880110
## stopped after 100 iterations
## # weights: 51
## initial value 332.507144
## iter 10 value 206.468167
## iter 20 value 185.770069
## iter 30 value 166.683877
## iter 40 value 154.910465
## iter 50 value 149.576967
## iter 60 value 147.327339
## iter 70 value 142.873243
## iter 80 value 136.216684
## iter 90 value 135.940559
## iter 100 value 135.925021
## final value 135.925021
## stopped after 100 iterations
## # weights: 71
## initial value 317.441265
## iter 10 value 202.926318
## iter 20 value 178.486888
## iter 30 value 155.571415
## iter 40 value 136.407552
## iter 50 value 122.503123
## iter 60 value 114.118587
## iter 70 value 108.525812
## iter 80 value 107.327726
## iter 90 value 107.107937
## iter 100 value 106.931134
## final value 106.931134
## stopped after 100 iterations
## # weights: 91
## initial value 320.940327
## iter 10 value 203.314311
## iter 20 value 173.814753
## iter 30 value 146.301364
## iter 40 value 125.406439
## iter 50 value 106.229317
## iter 60 value 97.679184
## iter 70 value 84.309554
## iter 80 value 78.263225
## iter 90 value 77.157488
## iter 100 value 76.244106
## final value 76.244106
## stopped after 100 iterations
## # weights: 11
## initial value 325.232423
## iter 10 value 224.457023
```

```
## iter 20 value 220.465322
## iter 30 value 220.384134
## final value 220.383925
## converged
## # weights: 31
## initial value 340.036141
## iter 10 value 218.144106
## iter 20 value 208.286657
## iter 30 value 205.805197
## iter 40 value 204.226715
## iter 50 value 199.697188
## iter 60 value 199.140547
## iter 70 value 199.098398
## final value 199.098276
## converged
## # weights: 51
## initial value 343.767338
## iter 10 value 215.743522
## iter 20 value 197.903208
## iter 30 value 189.755630
## iter 40 value 186.315327
## iter 50 value 185.250011
## iter 60 value 183.187840
## iter 70 value 182.818160
## iter 80 value 182.784636
## iter 90 value 182.779578
## iter 100 value 182.716514
## final value 182.716514
## stopped after 100 iterations
## # weights: 71
## initial value 324.499070
## iter 10 value 213.371763
## iter 20 value 191.619413
## iter 30 value 180.054741
## iter 40 value 174.860602
## iter 50 value 173.250548
## iter 60 value 172.340394
## iter 70 value 171.748499
## iter 80 value 171.683450
## iter 90 value 171.638855
## iter 100 value 171.635328
## final value 171.635328
## stopped after 100 iterations
## # weights: 91
## initial value 409.828717
## iter 10 value 212.378279
## iter 20 value 187.736949
## iter 30 value 177.680023
## iter 40 value 172.530683
## iter 50 value 169.588013
## iter 60 value 166.506128
## iter 70 value 164.726704
## iter 80 value 163.135249
## iter 90 value 162.870153
```

```
## iter 100 value 162.431706
## final value 162.431706
## stopped after 100 iterations
## # weights: 11
## initial value 380.092293
## iter 10 value 241.940966
## iter 20 value 216.828509
## iter 30 value 216.718861
## final value 216.717344
## converged
## # weights: 31
## initial value 423.114977
## iter 10 value 211.429492
## iter 20 value 205.622151
## iter 30 value 202.641517
## iter 40 value 197.752054
## iter 50 value 195.821970
## iter 60 value 195.701571
## iter 70 value 195.672370
## iter 80 value 195.654407
## iter 90 value 195.650733
## final value 195.650662
## converged
## # weights: 51
## initial value 322.555679
## iter 10 value 207.659987
## iter 20 value 182.219847
## iter 30 value 167.018836
## iter 40 value 161.128267
## iter 50 value 157.710371
## iter 60 value 156.246313
## iter 70 value 154.832807
## iter 80 value 154.451282
## iter 90 value 154.401607
## iter 100 value 154.398767
## final value 154.398767
## stopped after 100 iterations
## # weights: 71
## initial value 316.516122
## iter 10 value 199.198120
## iter 20 value 176.542595
## iter 30 value 170.552600
## iter 40 value 166.090912
## iter 50 value 161.293556
## iter 60 value 155.330209
## iter 70 value 152.695446
## iter 80 value 151.381921
## iter 90 value 151.182687
## iter 100 value 151.027689
## final value 151.027689
## stopped after 100 iterations
## # weights: 91
## initial value 347.713267
## iter 10 value 206.233913
```



```
## iter 20 value 179.744349
## iter 30 value 158.033458
## iter 40 value 146.476768
## iter 50 value 138.461998
## iter 60 value 136.370574
## iter 70 value 133.581179
## iter 80 value 129.335865
## iter 90 value 127.787260
## iter 100 value 126.657137
## final value 126.657137
## stopped after 100 iterations
## # weights: 11
## initial value 363.898326
## iter 10 value 217.121551
## iter 20 value 216.291600
## final value 216.266516
## converged
## # weights: 31
## initial value 364.487228
## iter 10 value 224.406979
## iter 20 value 206.957025
## iter 30 value 196.256942
## iter 40 value 194.739197
## iter 50 value 194.109756
## iter 60 value 192.808834
## iter 70 value 192.761245
## iter 80 value 192.157191
## iter 90 value 192.051811
## iter 100 value 191.970601
## final value 191.970601
## stopped after 100 iterations
## # weights: 51
## initial value 322.903093
## iter 10 value 214.014351
## iter 20 value 194.031542
## iter 30 value 182.441066
## iter 40 value 175.778855
## iter 50 value 173.618801
## iter 60 value 171.497686
## iter 70 value 169.722929
## iter 80 value 169.089915
## iter 90 value 169.029671
## iter 100 value 168.939051
## final value 168.939051
## stopped after 100 iterations
## # weights: 71
## initial value 392.522610
## iter 10 value 210.924111
## iter 20 value 178.752274
## iter 30 value 160.223054
## iter 40 value 146.152680
## iter 50 value 137.514080
## iter 60 value 133.446125
## iter 70 value 131.958252
```

```
## iter 80 value 130.326197
## iter 90 value 130.110165
## iter 100 value 129.759709
## final value 129.759709
## stopped after 100 iterations
## # weights: 91
## initial value 330.136263
## iter 10 value 207.697779
## iter 20 value 171.456753
## iter 30 value 140.974165
## iter 40 value 123.833907
## iter 50 value 112.351807
## iter 60 value 109.997204
## iter 70 value 105.037040
## iter 80 value 103.425743
## iter 90 value 102.261398
## iter 100 value 101.760941
## final value 101.760941
## stopped after 100 iterations
## # weights: 11
## initial value 317.362330
## iter 10 value 235.427551
## iter 20 value 224.961775
## iter 30 value 218.738652
## iter 40 value 216.339879
## iter 50 value 216.232166
## final value 216.231994
## converged
## # weights: 31
## initial value 318.026530
## iter 10 value 220.687576
## iter 20 value 210.510564
## iter 30 value 204.692768
## iter 40 value 197.898868
## iter 50 value 190.530778
## iter 60 value 188.689200
## iter 70 value 187.948856
## iter 80 value 187.440818
## iter 90 value 187.321331
## iter 100 value 187.234973
## final value 187.234973
## stopped after 100 iterations
## # weights: 51
## initial value 306.727542
## iter 10 value 210.706317
## iter 20 value 184.037555
## iter 30 value 172.061219
## iter 40 value 161.908838
## iter 50 value 154.670449
## iter 60 value 151.379022
## iter 70 value 148.836009
## iter 80 value 148.399153
## iter 90 value 148.348230
## iter 100 value 148.327633
```

```
## final value 148.327633
## stopped after 100 iterations
## # weights: 71
## initial value 309.675773
## iter 10 value 200.926821
## iter 20 value 162.049462
## iter 30 value 138.175292
## iter 40 value 130.007104
## iter 50 value 125.709476
## iter 60 value 119.450642
## iter 70 value 117.476303
## iter 80 value 116.455384
## iter 90 value 115.919029
## iter 100 value 115.691287
## final value 115.691287
## stopped after 100 iterations
## # weights: 91
## initial value 348.364420
## iter 10 value 200.188995
## iter 20 value 157.926836
## iter 30 value 130.729567
## iter 40 value 116.603230
## iter 50 value 109.654422
## iter 60 value 107.300563
## iter 70 value 106.097803
## iter 80 value 105.466673
## iter 90 value 105.129086
## iter 100 value 104.678222
## final value 104.678222
## stopped after 100 iterations
## # weights: 11
## initial value 313.279305
## iter 10 value 217.199906
## iter 20 value 214.234406
## iter 30 value 214.106000
## final value 214.097015
## converged
## # weights: 31
## initial value 357.530022
## iter 10 value 208.768208
## iter 20 value 199.241222
## iter 30 value 193.030723
## iter 40 value 186.887702
## iter 50 value 180.833165
## iter 60 value 178.766740
## iter 70 value 178.246003
## iter 80 value 176.939477
## iter 90 value 174.917900
## iter 100 value 174.862598
## final value 174.862598
## stopped after 100 iterations
## # weights: 51
## initial value 416.680581
## iter 10 value 211.583850
```

```
## iter 20 value 182.585408
## iter 30 value 173.301515
## iter 40 value 169.809286
## iter 50 value 164.515384
## iter 60 value 160.111360
## iter 70 value 156.898825
## iter 80 value 154.335599
## iter 90 value 153.531027
## iter 100 value 151.249058
## final value 151.249058
## stopped after 100 iterations
## # weights: 71
## initial value 326.369990
## iter 10 value 201.018819
## iter 20 value 170.524900
## iter 30 value 154.690598
## iter 40 value 142.903611
## iter 50 value 138.651972
## iter 60 value 122.705923
## iter 70 value 115.401666
## iter 80 value 115.098467
## iter 90 value 115.092171
## final value 115.092161
## converged
## # weights: 91
## initial value 332.307022
## iter 10 value 202.159121
## iter 20 value 178.684116
## iter 30 value 128.774530
## iter 40 value 90.897477
## iter 50 value 77.367975
## iter 60 value 74.205772
## iter 70 value 65.861899
## iter 80 value 60.370117
## iter 90 value 58.240457
## iter 100 value 57.215289
## final value 57.215289
## stopped after 100 iterations
## # weights: 11
## initial value 310.886445
## iter 10 value 229.304797
## iter 20 value 218.402246
## iter 30 value 217.791974
## final value 217.785675
## converged
## # weights: 31
## initial value 322.904291
## iter 10 value 221.777204
## iter 20 value 206.449806
## iter 30 value 203.515876
## iter 40 value 202.370397
## iter 50 value 200.575794
## iter 60 value 200.431820
## iter 70 value 200.427954
```

```
## iter 70 value 200.427954
## iter 70 value 200.427954
## final value 200.427954
## converged
## # weights: 51
## initial value 346.862666
## iter 10 value 213.253961
## iter 20 value 197.889383
## iter 30 value 194.680321
## iter 40 value 194.129864
## iter 50 value 194.023585
## iter 60 value 194.010006
## iter 70 value 194.007890
## iter 80 value 193.982224
## iter 90 value 193.201426
## iter 100 value 190.870912
## final value 190.870912
## stopped after 100 iterations
## # weights: 71
## initial value 395.917130
## iter 10 value 207.266694
## iter 20 value 194.455437
## iter 30 value 182.033614
## iter 40 value 176.887303
## iter 50 value 172.266193
## iter 60 value 170.671412
## iter 70 value 170.003043
## iter 80 value 169.027639
## iter 90 value 168.636051
## iter 100 value 168.601335
## final value 168.601335
## stopped after 100 iterations
## # weights: 91
## initial value 335.332645
## iter 10 value 210.576658
## iter 20 value 189.815050
## iter 30 value 181.438349
## iter 40 value 175.159777
## iter 50 value 169.958185
## iter 60 value 166.279716
## iter 70 value 161.919575
## iter 80 value 158.857169
## iter 90 value 157.336506
## iter 100 value 155.731853
## final value 155.731853
## stopped after 100 iterations
## # weights: 11
## initial value 373.680794
## iter 10 value 220.109073
## iter 20 value 217.915215
## iter 30 value 215.635075
## iter 40 value 214.662906
## final value 214.538970
## converged
```

```
## # weights: 31
## initial value 349.580537
## iter 10 value 206.723403
## iter 20 value 198.142504
## iter 30 value 196.044557
## iter 40 value 192.197065
## iter 50 value 191.808894
## iter 60 value 191.786118
## iter 70 value 191.785614
## iter 80 value 191.785374
## final value 191.785370
## converged
## # weights: 51
## initial value 314.754558
## iter 10 value 205.206864
## iter 20 value 186.080844
## iter 30 value 172.311901
## iter 40 value 166.522468
## iter 50 value 166.007380
## iter 60 value 165.858202
## iter 70 value 165.800169
## iter 80 value 165.797280
## iter 90 value 165.796875
## final value 165.796831
## converged
## # weights: 71
## initial value 305.796906
## iter 10 value 205.723655
## iter 20 value 176.361811
## iter 30 value 161.811254
## iter 40 value 155.250700
## iter 50 value 152.293019
## iter 60 value 148.977023
## iter 70 value 148.150622
## iter 80 value 147.714825
## iter 90 value 147.415032
## iter 100 value 147.254231
## final value 147.254231
## stopped after 100 iterations
## # weights: 91
## initial value 351.049640
## iter 10 value 203.462727
## iter 20 value 168.902785
## iter 30 value 151.377182
## iter 40 value 145.227160
## iter 50 value 143.182576
## iter 60 value 141.073964
## iter 70 value 139.113360
## iter 80 value 138.018699
## iter 90 value 137.174940
## iter 100 value 136.601481
## final value 136.601481
## stopped after 100 iterations
## # weights: 11
```

```
## initial value 357.800177
## iter 10 value 220.771635
## iter 20 value 217.599508
## iter 30 value 217.326682
## iter 40 value 215.054517
## iter 50 value 214.169910
## iter 60 value 214.142858
## final value 214.142766
## converged
## # weights: 31
## initial value 322.883805
## iter 10 value 211.567435
## iter 20 value 193.295512
## iter 30 value 191.089563
## iter 40 value 189.901443
## iter 50 value 187.717156
## iter 60 value 186.840089
## iter 70 value 186.624395
## iter 80 value 186.186953
## iter 90 value 184.532179
## iter 100 value 184.285676
## final value 184.285676
## stopped after 100 iterations
## # weights: 51
## initial value 342.387373
## iter 10 value 212.269844
## iter 20 value 187.842401
## iter 30 value 169.509555
## iter 40 value 163.096785
## iter 50 value 157.990166
## iter 60 value 154.118852
## iter 70 value 152.807448
## iter 80 value 151.902029
## iter 90 value 151.629190
## iter 100 value 151.256739
## final value 151.256739
## stopped after 100 iterations
## # weights: 71
## initial value 408.879088
## iter 10 value 201.662490
## iter 20 value 172.168168
## iter 30 value 144.402213
## iter 40 value 133.088430
## iter 50 value 125.788246
## iter 60 value 123.599838
## iter 70 value 120.555387
## iter 80 value 119.294430
## iter 90 value 118.438518
## iter 100 value 116.045923
## final value 116.045923
## stopped after 100 iterations
## # weights: 91
## initial value 449.805427
## iter 10 value 191.144430
```

```
## iter 20 value 159.092004
## iter 30 value 127.017528
## iter 40 value 113.353825
## iter 50 value 109.220658
## iter 60 value 105.744585
## iter 70 value 104.675659
## iter 80 value 103.477896
## iter 90 value 103.121677
## iter 100 value 102.659233
## final value 102.659233
## stopped after 100 iterations
## # weights: 11
## initial value 375.949098
## iter 10 value 223.116431
## iter 20 value 214.542559
## iter 30 value 214.157933
## iter 40 value 214.103701
## iter 40 value 214.103700
## iter 40 value 214.103700
## final value 214.103700
## converged
## # weights: 31
## initial value 323.429859
## iter 10 value 209.070691
## iter 20 value 197.095341
## iter 30 value 187.515610
## iter 40 value 183.020497
## iter 50 value 178.011148
## iter 60 value 177.661505
## iter 70 value 177.600914
## iter 80 value 177.371772
## iter 90 value 176.295534
## iter 100 value 176.267274
## final value 176.267274
## stopped after 100 iterations
## # weights: 51
## initial value 364.524072
## iter 10 value 209.574725
## iter 20 value 191.223434
## iter 30 value 184.296895
## iter 40 value 178.019713
## iter 50 value 166.444754
## iter 60 value 162.888387
## iter 70 value 162.356718
## iter 80 value 161.932449
## iter 90 value 161.643065
## iter 100 value 161.421405
## final value 161.421405
## stopped after 100 iterations
## # weights: 71
## initial value 339.740004
## iter 10 value 203.241324
## iter 20 value 168.942804
## iter 30 value 138.704658
```



```
## iter 40 value 126.229537
## iter 50 value 118.841453
## iter 60 value 117.421535
## iter 70 value 117.097175
## iter 80 value 116.922146
## iter 90 value 116.834959
## iter 100 value 116.742757
## final value 116.742757
## stopped after 100 iterations
## # weights: 91
## initial value 305.010300
## iter 10 value 194.979312
## iter 20 value 166.001568
## iter 30 value 128.479188
## iter 40 value 107.780692
## iter 50 value 97.179972
## iter 60 value 92.005931
## iter 70 value 89.611223
## iter 80 value 88.616228
## iter 90 value 86.046198
## iter 100 value 85.631583
## final value 85.631583
## stopped after 100 iterations
## # weights: 11
## initial value 322.707106
## iter 10 value 224.885737
## iter 20 value 221.138122
## iter 30 value 220.289902
## iter 40 value 220.289567
## iter 40 value 220.289566
## final value 220.289557
## converged
## # weights: 31
## initial value 375.142439
## iter 10 value 223.393152
## iter 20 value 210.279213
## iter 30 value 202.167895
## iter 40 value 196.903734
## iter 50 value 188.322432
## iter 60 value 185.763848
## final value 185.744138
## converged
## # weights: 51
## initial value 332.228728
## iter 10 value 214.755535
## iter 20 value 193.625261
## iter 30 value 179.334916
## iter 40 value 173.359016
## iter 50 value 164.127285
## iter 60 value 154.971571
## iter 70 value 153.417121
## iter 80 value 153.359648
## iter 90 value 153.355669
## final value 153.355471
```

```
## converged
## # weights:  71
## initial  value 393.763132
## iter   10 value 211.859806
## iter   20 value 178.627909
## iter   30 value 163.659123
## iter   40 value 151.849586
## iter   50 value 143.648112
## iter   60 value 139.510848
## iter   70 value 132.854102
## iter   80 value 121.892752
## iter   90 value 121.046729
## iter  100 value 121.041584
## final   value 121.041584
## stopped after 100 iterations
## # weights:  91
## initial  value 338.011435
## iter   10 value 209.651852
## iter   20 value 171.948921
## iter   30 value 150.115601
## iter   40 value 133.333129
## iter   50 value 121.907621
## iter   60 value 114.409891
## iter   70 value 101.241823
## iter   80 value  98.943583
## iter   90 value  98.908248
## iter  100 value  98.907677
## final   value  98.907677
## stopped after 100 iterations
## # weights:  11
## initial  value 315.369090
## iter   10 value 225.986127
## iter   20 value 223.812476
## iter   30 value 223.769577
## final   value 223.769554
## converged
## # weights:  31
## initial  value 374.417333
## iter   10 value 228.823772
## iter   20 value 213.269512
## iter   30 value 205.316382
## iter   40 value 204.668881
## iter   50 value 204.568163
## iter   60 value 204.567088
## final   value 204.567083
## converged
## # weights:  51
## initial  value 400.329228
## iter   10 value 217.382563
## iter   20 value 201.247763
## iter   30 value 195.338580
## iter   40 value 193.591454
## iter   50 value 193.130695
## iter   60 value 192.868428
```

```
## iter 70 value 192.722605
## iter 80 value 192.670719
## final value 192.669374
## converged
## # weights: 71
## initial value 356.399692
## iter 10 value 214.435619
## iter 20 value 198.918583
## iter 30 value 192.522329
## iter 40 value 182.801626
## iter 50 value 179.301681
## iter 60 value 178.204828
## iter 70 value 178.077217
## iter 80 value 178.063390
## iter 90 value 178.058835
## iter 100 value 178.057529
## final value 178.057529
## stopped after 100 iterations
## # weights: 91
## initial value 473.057012
## iter 10 value 216.419916
## iter 20 value 200.328953
## iter 30 value 187.661467
## iter 40 value 182.082672
## iter 50 value 177.332039
## iter 60 value 175.627856
## iter 70 value 174.409625
## iter 80 value 172.441293
## iter 90 value 169.786415
## iter 100 value 169.089836
## final value 169.089836
## stopped after 100 iterations
## # weights: 11
## initial value 427.757627
## iter 10 value 234.772040
## iter 20 value 230.953478
## iter 30 value 225.352493
## iter 40 value 220.798634
## iter 50 value 220.717041
## final value 220.716916
## converged
## # weights: 31
## initial value 402.430871
## iter 10 value 216.304318
## iter 20 value 207.305878
## iter 30 value 206.286221
## iter 40 value 202.169539
## iter 50 value 200.456264
## iter 60 value 199.772703
## iter 70 value 199.747214
## iter 80 value 199.745631
## iter 90 value 199.744689
## final value 199.744511
## converged
```

```
## # weights:  51
## initial  value 344.785914
## iter   10 value 213.481744
## iter   20 value 194.421132
## iter   30 value 185.937532
## iter   40 value 185.139777
## iter   50 value 183.989911
## iter   60 value 183.814368
## iter   70 value 183.790733
## iter   80 value 183.789589
## final   value 183.789434
## converged
## # weights:  71
## initial  value 353.863220
## iter   10 value 211.813984
## iter   20 value 181.308562
## iter   30 value 166.536332
## iter   40 value 164.334813
## iter   50 value 160.014604
## iter   60 value 157.309492
## iter   70 value 155.780868
## iter   80 value 155.392704
## iter   90 value 154.965374
## iter  100 value 151.777569
## final   value 151.777569
## stopped after 100 iterations
## # weights:  91
## initial  value 593.044537
## iter   10 value 209.422289
## iter   20 value 178.666717
## iter   30 value 160.444424
## iter   40 value 149.544998
## iter   50 value 142.204842
## iter   60 value 137.163595
## iter   70 value 129.604813
## iter   80 value 124.524628
## iter   90 value 122.673499
## iter  100 value 121.388309
## final   value 121.388309
## stopped after 100 iterations
## # weights:  11
## initial  value 315.666811
## iter   10 value 238.530294
## iter   20 value 235.192616
## iter   30 value 234.939982
## iter   40 value 234.236515
## final   value 234.196701
## converged
## # weights:  31
## initial  value 338.829526
## iter   10 value 234.781497
## iter   20 value 210.169814
## iter   30 value 207.024925
## iter   40 value 197.735601
```

```
## iter 50 value 194.063953
## iter 60 value 191.753932
## iter 70 value 191.333699
## iter 80 value 191.219186
## iter 90 value 190.091565
## iter 100 value 189.863996
## final value 189.863996
## stopped after 100 iterations
## # weights: 51
## initial value 385.825261
## iter 10 value 210.458731
## iter 20 value 196.613991
## iter 30 value 185.369286
## iter 40 value 177.489780
## iter 50 value 172.792596
## iter 60 value 168.767013
## iter 70 value 166.150016
## iter 80 value 165.146434
## iter 90 value 164.576336
## iter 100 value 164.055998
## final value 164.055998
## stopped after 100 iterations
## # weights: 71
## initial value 417.037528
## iter 10 value 206.348934
## iter 20 value 174.829536
## iter 30 value 139.628167
## iter 40 value 130.612144
## iter 50 value 126.764378
## iter 60 value 124.656177
## iter 70 value 123.812382
## iter 80 value 123.438109
## iter 90 value 122.845609
## iter 100 value 122.565767
## final value 122.565767
## stopped after 100 iterations
## # weights: 91
## initial value 449.152243
## iter 10 value 205.980744
## iter 20 value 162.257983
## iter 30 value 143.108435
## iter 40 value 128.552595
## iter 50 value 123.160059
## iter 60 value 121.355858
## iter 70 value 120.475120
## iter 80 value 120.015552
## iter 90 value 119.382167
## iter 100 value 118.892607
## final value 118.892607
## stopped after 100 iterations
## # weights: 11
## initial value 364.957689
## iter 10 value 233.053790
## iter 20 value 230.642015
```

```
## iter 30 value 224.938111
## iter 40 value 220.561073
## iter 50 value 220.297837
## iter 60 value 220.294045
## iter 60 value 220.294045
## iter 60 value 220.294045
## final value 220.294045
## converged
## # weights: 31
## initial value 484.552062
## iter 10 value 216.307442
## iter 20 value 208.507652
## iter 30 value 205.675131
## iter 40 value 198.007305
## iter 50 value 191.492908
## iter 60 value 190.030391
## iter 70 value 189.737037
## iter 80 value 189.476676
## iter 90 value 189.419335
## iter 100 value 189.418014
## final value 189.418014
## stopped after 100 iterations
## # weights: 51
## initial value 366.588136
## iter 10 value 215.322123
## iter 20 value 194.779058
## iter 30 value 181.620498
## iter 40 value 175.649053
## iter 50 value 168.850547
## iter 60 value 161.879639
## iter 70 value 161.230496
## iter 80 value 161.059120
## iter 90 value 160.818680
## iter 100 value 160.757727
## final value 160.757727
## stopped after 100 iterations
## # weights: 71
## initial value 466.344631
## iter 10 value 209.675389
## iter 20 value 174.940755
## iter 30 value 161.038482
## iter 40 value 153.883219
## iter 50 value 146.613353
## iter 60 value 142.465504
## iter 70 value 140.832274
## iter 80 value 140.001862
## iter 90 value 139.834510
## iter 100 value 139.794697
## final value 139.794697
## stopped after 100 iterations
## # weights: 91
## initial value 371.542598
## iter 10 value 206.589262
## iter 20 value 168.132351
```

```
## iter 30 value 137.791484
## iter 40 value 118.642089
## iter 50 value 111.441995
## iter 60 value 108.402466
## iter 70 value 104.216922
## iter 80 value 101.908233
## iter 90 value 100.230301
## iter 100 value 98.513151
## final value 98.513151
## stopped after 100 iterations
## # weights: 11
## initial value 349.198801
## iter 10 value 229.973771
## iter 20 value 220.563436
## iter 30 value 218.405131
## final value 218.304449
## converged
## # weights: 31
## initial value 324.078500
## iter 10 value 219.135706
## iter 20 value 199.628379
## iter 30 value 196.151461
## iter 40 value 192.124439
## iter 50 value 190.233434
## iter 60 value 183.302127
## iter 70 value 180.610838
## iter 80 value 179.770877
## iter 90 value 179.452662
## iter 100 value 179.434246
## final value 179.434246
## stopped after 100 iterations
## # weights: 51
## initial value 418.798806
## iter 10 value 213.802601
## iter 20 value 185.219395
## iter 30 value 175.194581
## iter 40 value 170.979112
## iter 50 value 168.625306
## iter 60 value 161.788009
## iter 70 value 155.647521
## iter 80 value 149.883128
## iter 90 value 147.560818
## iter 100 value 147.476808
## final value 147.476808
## stopped after 100 iterations
## # weights: 71
## initial value 339.077386
## iter 10 value 205.881975
## iter 20 value 173.139280
## iter 30 value 150.131628
## iter 40 value 137.398353
## iter 50 value 127.394218
## iter 60 value 122.212841
## iter 70 value 121.988639
```

```
## iter 80 value 121.936224
## final value 121.936126
## converged
## # weights: 91
## initial value 334.132991
## iter 10 value 207.406974
## iter 20 value 171.680902
## iter 30 value 142.012758
## iter 40 value 123.361164
## iter 50 value 115.404406
## iter 60 value 105.064761
## iter 70 value 100.794866
## iter 80 value 100.410971
## iter 90 value 100.377384
## final value 100.377066
## converged
## # weights: 11
## initial value 318.234293
## iter 10 value 239.726852
## iter 20 value 224.113033
## iter 30 value 221.522810
## final value 221.444516
## converged
## # weights: 31
## initial value 411.752617
## iter 10 value 225.999424
## iter 20 value 208.312871
## iter 30 value 204.092789
## iter 40 value 202.799096
## iter 50 value 202.404989
## final value 202.404135
## converged
## # weights: 51
## initial value 376.267024
## iter 10 value 231.821583
## iter 20 value 204.820098
## iter 30 value 197.308992
## iter 40 value 193.606924
## iter 50 value 190.616584
## iter 60 value 189.944630
## iter 70 value 189.781390
## iter 80 value 189.703307
## iter 90 value 189.280750
## iter 100 value 187.650311
## final value 187.650311
## stopped after 100 iterations
## # weights: 71
## initial value 439.747272
## iter 10 value 215.640598
## iter 20 value 194.236104
## iter 30 value 185.259452
## iter 40 value 177.716359
## iter 50 value 175.986793
## iter 60 value 175.423314
```



```
## iter 70 value 175.291521
## iter 80 value 175.266212
## iter 90 value 175.255367
## iter 100 value 175.250626
## final value 175.250626
## stopped after 100 iterations
## # weights: 91
## initial value 352.155478
## iter 10 value 212.857683
## iter 20 value 194.619792
## iter 30 value 184.061209
## iter 40 value 174.819113
## iter 50 value 170.163547
## iter 60 value 167.169009
## iter 70 value 166.055435
## iter 80 value 164.650223
## iter 90 value 164.336108
## iter 100 value 164.235654
## final value 164.235654
## stopped after 100 iterations
## # weights: 11
## initial value 365.314268
## iter 10 value 231.980969
## iter 20 value 227.105725
## iter 30 value 221.570965
## iter 40 value 218.739637
## iter 50 value 218.659744
## final value 218.656015
## converged
## # weights: 31
## initial value 322.508083
## iter 10 value 223.213790
## iter 20 value 217.770129
## iter 30 value 206.310320
## iter 40 value 196.508473
## iter 50 value 195.382586
## iter 60 value 195.331842
## iter 70 value 195.330261
## final value 195.330232
## converged
## # weights: 51
## initial value 397.815539
## iter 10 value 208.522615
## iter 20 value 196.060516
## iter 30 value 187.197429
## iter 40 value 179.625147
## iter 50 value 178.838001
## iter 60 value 178.427273
## iter 70 value 178.392868
## iter 80 value 178.389331
## final value 178.389235
## converged
## # weights: 71
## initial value 330.949243
```

```
## iter 10 value 212.607625
## iter 20 value 192.408977
## iter 30 value 177.298026
## iter 40 value 162.831227
## iter 50 value 159.783336
## iter 60 value 157.377528
## iter 70 value 155.812965
## iter 80 value 154.367353
## iter 90 value 153.392278
## iter 100 value 151.331418
## final value 151.331418
## stopped after 100 iterations
## # weights: 91
## initial value 328.958343
## iter 10 value 205.293592
## iter 20 value 168.908954
## iter 30 value 151.269130
## iter 40 value 134.996762
## iter 50 value 130.366345
## iter 60 value 128.617569
## iter 70 value 126.358182
## iter 80 value 123.907822
## iter 90 value 122.538399
## iter 100 value 117.865759
## final value 117.865759
## stopped after 100 iterations
## # weights: 11
## initial value 363.472512
## iter 10 value 221.420913
## iter 20 value 218.414311
## iter 30 value 218.360729
## final value 218.340278
## converged
## # weights: 31
## initial value 385.211977
## iter 10 value 218.407494
## iter 20 value 204.982377
## iter 30 value 200.676750
## iter 40 value 197.753665
## iter 50 value 196.897474
## iter 60 value 196.220112
## iter 70 value 196.000198
## iter 80 value 195.628245
## iter 90 value 194.598430
## iter 100 value 194.552443
## final value 194.552443
## stopped after 100 iterations
## # weights: 51
## initial value 338.721409
## iter 10 value 219.452175
## iter 20 value 203.293498
## iter 30 value 185.202385
## iter 40 value 178.389814
## iter 50 value 174.131136
```

```
## iter 60 value 172.453345
## iter 70 value 171.612317
## iter 80 value 170.816243
## iter 90 value 170.659786
## iter 100 value 170.618927
## final value 170.618927
## stopped after 100 iterations
## # weights: 71
## initial value 327.208227
## iter 10 value 207.780774
## iter 20 value 181.960719
## iter 30 value 165.323618
## iter 40 value 155.181091
## iter 50 value 143.913851
## iter 60 value 140.101494
## iter 70 value 138.246715
## iter 80 value 136.708645
## iter 90 value 135.997247
## iter 100 value 135.816994
## final value 135.816994
## stopped after 100 iterations
## # weights: 91
## initial value 309.052846
## iter 10 value 204.325697
## iter 20 value 171.004439
## iter 30 value 141.223598
## iter 40 value 123.795572
## iter 50 value 118.464482
## iter 60 value 115.034659
## iter 70 value 112.628008
## iter 80 value 111.751854
## iter 90 value 111.145019
## iter 100 value 110.746866
## final value 110.746866
## stopped after 100 iterations
## # weights: 11
## initial value 354.033607
## iter 10 value 221.169376
## iter 20 value 218.397732
## final value 218.308982
## converged
## # weights: 31
## initial value 317.730797
## iter 10 value 210.770936
## iter 20 value 199.958640
## iter 30 value 196.146461
## iter 40 value 193.513434
## iter 50 value 190.544042
## iter 60 value 184.322473
## iter 70 value 184.189418
## iter 80 value 184.115168
## iter 90 value 183.946819
## iter 100 value 183.324333
## final value 183.324333
```

```
## stopped after 100 iterations
## # weights:  51
## initial  value 345.000301
## iter   10 value 206.752592
## iter   20 value 190.939058
## iter   30 value 185.161798
## iter   40 value 180.842220
## iter   50 value 176.936861
## iter   60 value 172.527039
## iter   70 value 169.438458
## iter   80 value 166.401213
## iter   90 value 163.407225
## iter  100 value 163.029403
## final  value 163.029403
## stopped after 100 iterations
## # weights:  71
## initial  value 312.148871
## iter   10 value 211.409801
## iter   20 value 188.458007
## iter   30 value 164.622185
## iter   40 value 150.712053
## iter   50 value 143.468748
## iter   60 value 135.506612
## iter   70 value 130.473619
## iter   80 value 129.254038
## iter   90 value 128.492451
## iter  100 value 127.965054
## final  value 127.965054
## stopped after 100 iterations
## # weights:  91
## initial  value 392.982224
## iter   10 value 207.121155
## iter   20 value 165.845636
## iter   30 value 136.806230
## iter   40 value 125.270169
## iter   50 value 115.907754
## iter   60 value 110.989004
## iter   70 value 109.174718
## iter   80 value 108.543889
## iter   90 value 108.344139
## iter  100 value 107.552746
## final  value 107.552746
## stopped after 100 iterations
## # weights:  11
## initial  value 321.651520
## iter   10 value 231.913735
## iter   20 value 228.188717
## iter   30 value 227.847061
## iter   40 value 220.757720
## final  value 219.507523
## converged
## # weights:  31
## initial  value 359.400491
## iter   10 value 211.543776
```

```
## iter 20 value 194.938228
## iter 30 value 190.790254
## iter 40 value 177.963964
## iter 50 value 175.659726
## iter 60 value 175.643013
## final value 175.642922
## converged
## # weights: 51
## initial value 336.348167
## iter 10 value 208.954672
## iter 20 value 183.190473
## iter 30 value 177.258960
## iter 40 value 162.211647
## iter 50 value 158.858342
## iter 60 value 158.728016
## iter 70 value 158.688210
## iter 80 value 158.679276
## iter 90 value 158.678832
## final value 158.678268
## converged
## # weights: 71
## initial value 622.564898
## iter 10 value 199.044037
## iter 20 value 166.250894
## iter 30 value 148.029470
## iter 40 value 135.133931
## iter 50 value 120.243512
## iter 60 value 112.883867
## iter 70 value 111.348421
## iter 80 value 111.010783
## iter 90 value 110.930933
## iter 100 value 110.896227
## final value 110.896227
## stopped after 100 iterations
## # weights: 91
## initial value 454.107538
## iter 10 value 209.870995
## iter 20 value 162.748478
## iter 30 value 133.615654
## iter 40 value 117.528856
## iter 50 value 108.411697
## iter 60 value 95.981466
## iter 70 value 92.479338
## iter 80 value 92.366484
## iter 90 value 92.358896
## iter 100 value 92.354709
## final value 92.354709
## stopped after 100 iterations
## # weights: 11
## initial value 314.035690
## iter 10 value 231.332071
## iter 20 value 224.543786
## iter 30 value 223.765198
## final value 223.714137
```

```
## converged
## # weights: 31
## initial value 329.542739
## iter 10 value 227.923321
## iter 20 value 212.685764
## iter 30 value 210.294820
## iter 40 value 206.742965
## iter 50 value 204.569005
## iter 60 value 204.231325
## iter 70 value 204.209902
## iter 80 value 204.139469
## iter 90 value 203.930186
## iter 100 value 203.698027
## final value 203.698027
## stopped after 100 iterations
## # weights: 51
## initial value 298.890481
## iter 10 value 215.842860
## iter 20 value 203.104816
## iter 30 value 197.944897
## iter 40 value 196.794719
## iter 50 value 193.220546
## iter 60 value 191.614054
## iter 70 value 190.344855
## iter 80 value 190.193834
## iter 90 value 190.193198
## final value 190.193177
## converged
## # weights: 71
## initial value 512.034884
## iter 10 value 230.625551
## iter 20 value 198.238679
## iter 30 value 189.541100
## iter 40 value 186.780597
## iter 50 value 184.479436
## iter 60 value 183.476302
## iter 70 value 182.564566
## iter 80 value 180.979108
## iter 90 value 180.469922
## iter 100 value 180.415254
## final value 180.415254
## stopped after 100 iterations
## # weights: 91
## initial value 362.662658
## iter 10 value 210.839101
## iter 20 value 193.401994
## iter 30 value 186.246756
## iter 40 value 182.258705
## iter 50 value 178.284004
## iter 60 value 176.260910
## iter 70 value 174.882388
## iter 80 value 174.497258
## iter 90 value 174.420672
## iter 100 value 174.394435
```

```
## final value 174.394435
## stopped after 100 iterations
## # weights: 11
## initial value 363.377346
## iter 10 value 223.149664
## iter 20 value 220.036682
## iter 30 value 219.731570
## iter 40 value 219.729086
## iter 40 value 219.729086
## iter 40 value 219.729086
## final value 219.729086
## converged
## # weights: 31
## initial value 356.875909
## iter 10 value 221.046577
## iter 20 value 207.238316
## iter 30 value 197.281968
## iter 40 value 195.427227
## iter 50 value 194.600084
## iter 60 value 193.458450
## iter 70 value 192.211059
## iter 80 value 189.415222
## iter 90 value 186.390934
## iter 100 value 186.283691
## final value 186.283691
## stopped after 100 iterations
## # weights: 51
## initial value 330.731217
## iter 10 value 209.752690
## iter 20 value 195.515322
## iter 30 value 183.471821
## iter 40 value 180.331598
## iter 50 value 180.174505
## iter 60 value 179.956846
## iter 70 value 179.916619
## iter 80 value 179.911152
## iter 90 value 179.910765
## final value 179.910649
## converged
## # weights: 71
## initial value 551.730966
## iter 10 value 202.918544
## iter 20 value 177.586755
## iter 30 value 167.697523
## iter 40 value 161.849716
## iter 50 value 154.937393
## iter 60 value 152.988576
## iter 70 value 152.336355
## iter 80 value 152.129349
## iter 90 value 152.104405
## iter 100 value 152.102336
## final value 152.102336
## stopped after 100 iterations
## # weights: 91
```

```
## initial value 444.560706
## iter 10 value 209.559702
## iter 20 value 183.568962
## iter 30 value 161.748024
## iter 40 value 153.418120
## iter 50 value 149.660992
## iter 60 value 147.662600
## iter 70 value 146.876132
## iter 80 value 146.362125
## iter 90 value 145.389222
## iter 100 value 144.993719
## final value 144.993719
## stopped after 100 iterations
## # weights: 11
## initial value 377.404446
## iter 10 value 231.086157
## iter 20 value 228.127798
## iter 30 value 227.436668
## iter 40 value 225.980735
## iter 50 value 225.865184
## iter 60 value 225.861632
## final value 225.861289
## converged
## # weights: 31
## initial value 312.018265
## iter 10 value 213.801861
## iter 20 value 195.072447
## iter 30 value 191.196198
## iter 40 value 186.089906
## iter 50 value 185.298871
## iter 60 value 183.972349
## iter 70 value 183.733041
## iter 80 value 183.553180
## iter 90 value 183.552897
## final value 183.552803
## converged
## # weights: 51
## initial value 404.758329
## iter 10 value 218.453190
## iter 20 value 193.365097
## iter 30 value 171.708502
## iter 40 value 164.670062
## iter 50 value 161.796287
## iter 60 value 159.572248
## iter 70 value 159.298568
## iter 80 value 159.188954
## iter 90 value 159.012192
## iter 100 value 158.788227
## final value 158.788227
## stopped after 100 iterations
## # weights: 71
## initial value 325.988361
## iter 10 value 210.433781
## iter 20 value 179.624608
```



```
## iter 30 value 157.649335
## iter 40 value 139.309084
## iter 50 value 134.024717
## iter 60 value 128.666345
## iter 70 value 126.820003
## iter 80 value 126.574936
## iter 90 value 126.367685
## iter 100 value 126.190989
## final value 126.190989
## stopped after 100 iterations
## # weights: 91
## initial value 347.807564
## iter 10 value 207.342658
## iter 20 value 178.409986
## iter 30 value 149.167601
## iter 40 value 125.428555
## iter 50 value 114.679214
## iter 60 value 113.277986
## iter 70 value 112.159711
## iter 80 value 111.010948
## iter 90 value 110.784442
## iter 100 value 110.640736
## final value 110.640736
## stopped after 100 iterations
## # weights: 11
## initial value 313.396974
## iter 10 value 228.167446
## iter 20 value 222.058699
## iter 30 value 219.589902
## iter 40 value 219.310817
## final value 219.310717
## converged
## # weights: 31
## initial value 297.125446
## iter 10 value 213.636913
## iter 20 value 201.851119
## iter 30 value 198.389667
## iter 40 value 192.142668
## iter 50 value 189.368878
## iter 60 value 188.823810
## iter 70 value 188.612633
## iter 80 value 188.049482
## iter 90 value 187.457586
## iter 100 value 187.327182
## final value 187.327182
## stopped after 100 iterations
## # weights: 51
## initial value 292.379145
## iter 10 value 205.038459
## iter 20 value 184.875733
## iter 30 value 172.619562
## iter 40 value 161.173179
## iter 50 value 156.004266
## iter 60 value 155.630989
```

```
## iter 70 value 154.829786
## iter 80 value 153.381984
## iter 90 value 152.914205
## iter 100 value 152.598923
## final value 152.598923
## stopped after 100 iterations
## # weights: 71
## initial value 322.720322
## iter 10 value 205.919738
## iter 20 value 170.291373
## iter 30 value 146.480411
## iter 40 value 135.377545
## iter 50 value 123.302750
## iter 60 value 117.356392
## iter 70 value 116.356348
## iter 80 value 116.115936
## iter 90 value 115.624772
## iter 100 value 115.389353
## final value 115.389353
## stopped after 100 iterations
## # weights: 91
## initial value 340.752523
## iter 10 value 210.551389
## iter 20 value 178.693886
## iter 30 value 155.394455
## iter 40 value 138.961356
## iter 50 value 130.377481
## iter 60 value 118.720764
## iter 70 value 112.926347
## iter 80 value 111.852226
## iter 90 value 111.429693
## iter 100 value 110.919784
## final value 110.919784
## stopped after 100 iterations
## # weights: 11
## initial value 385.476137
## iter 10 value 240.709720
## iter 20 value 238.003772
## iter 30 value 237.374211
## iter 40 value 232.413603
## iter 50 value 232.319994
## iter 60 value 232.292682
## iter 70 value 232.287991
## iter 80 value 232.284615
## iter 90 value 232.279891
## iter 100 value 232.278170
## final value 232.278170
## stopped after 100 iterations
## # weights: 31
## initial value 355.709263
## iter 10 value 210.351835
## iter 20 value 199.072740
## iter 30 value 195.963593
## iter 40 value 191.532727
```

```
## iter 50 value 184.893313
## iter 60 value 184.424899
## iter 70 value 184.329516
## iter 80 value 184.189143
## iter 90 value 184.175117
## iter 100 value 183.967318
## final value 183.967318
## stopped after 100 iterations
## # weights: 51
## initial value 323.892728
## iter 10 value 213.539334
## iter 20 value 194.414109
## iter 30 value 176.578781
## iter 40 value 164.873065
## iter 50 value 155.281509
## iter 60 value 151.448888
## iter 70 value 150.550118
## iter 80 value 150.493583
## iter 90 value 150.489967
## final value 150.489963
## converged
## # weights: 71
## initial value 575.957217
## iter 10 value 213.807749
## iter 20 value 179.433283
## iter 30 value 164.410926
## iter 40 value 157.031810
## iter 50 value 148.095064
## iter 60 value 141.522219
## iter 70 value 137.444226
## iter 80 value 134.192586
## iter 90 value 132.248742
## iter 100 value 127.744189
## final value 127.744189
## stopped after 100 iterations
## # weights: 91
## initial value 360.108832
## iter 10 value 205.005308
## iter 20 value 173.251617
## iter 30 value 140.595637
## iter 40 value 124.184122
## iter 50 value 114.121267
## iter 60 value 99.370095
## iter 70 value 92.957023
## iter 80 value 86.338123
## iter 90 value 82.564949
## iter 100 value 81.244428
## final value 81.244428
## stopped after 100 iterations
## # weights: 11
## initial value 339.748604
## iter 10 value 226.299842
## iter 20 value 223.381578
## final value 223.327462
```

```
## converged
## # weights: 31
## initial value 508.060688
## iter 10 value 233.375614
## iter 20 value 214.478431
## iter 30 value 208.894025
## iter 40 value 206.548698
## iter 50 value 205.169933
## iter 60 value 205.134606
## iter 70 value 205.134050
## final value 205.133975
## converged
## # weights: 51
## initial value 341.682386
## iter 10 value 212.521876
## iter 20 value 203.299354
## iter 30 value 199.820050
## iter 40 value 196.246310
## iter 50 value 192.631189
## iter 60 value 190.206428
## iter 70 value 189.558640
## iter 80 value 189.050926
## iter 90 value 188.076000
## iter 100 value 188.034552
## final value 188.034552
## stopped after 100 iterations
## # weights: 71
## initial value 319.682259
## iter 10 value 209.462369
## iter 20 value 194.231151
## iter 30 value 187.399869
## iter 40 value 185.406266
## iter 50 value 183.766786
## iter 60 value 183.669439
## iter 70 value 183.064256
## iter 80 value 182.585142
## iter 90 value 182.557742
## iter 100 value 182.557391
## final value 182.557391
## stopped after 100 iterations
## # weights: 91
## initial value 480.593215
## iter 10 value 207.987201
## iter 20 value 191.381291
## iter 30 value 184.774254
## iter 40 value 174.733218
## iter 50 value 166.757471
## iter 60 value 165.486898
## iter 70 value 165.156921
## iter 80 value 165.029583
## iter 90 value 164.911024
## iter 100 value 164.883654
## final value 164.883654
## stopped after 100 iterations
```

```
## # weights: 11
## initial value 470.406635
## iter 10 value 235.927390
## iter 20 value 228.534186
## iter 30 value 226.208472
## iter 40 value 219.358567
## iter 50 value 218.753501
## iter 60 value 218.722331
## final value 218.720255
## converged
## # weights: 31
## initial value 311.273347
## iter 10 value 205.694692
## iter 20 value 194.208374
## iter 30 value 191.256637
## iter 40 value 191.013303
## iter 50 value 191.003916
## final value 191.003707
## converged
## # weights: 51
## initial value 324.554338
## iter 10 value 221.915403
## iter 20 value 201.302464
## iter 30 value 191.065298
## iter 40 value 180.067444
## iter 50 value 173.662439
## iter 60 value 172.583734
## iter 70 value 171.991282
## iter 80 value 171.644176
## iter 90 value 171.114719
## iter 100 value 171.033988
## final value 171.033988
## stopped after 100 iterations
## # weights: 71
## initial value 333.097934
## iter 10 value 210.487336
## iter 20 value 186.197098
## iter 30 value 173.080553
## iter 40 value 169.072647
## iter 50 value 161.252386
## iter 60 value 156.312555
## iter 70 value 155.219696
## iter 80 value 155.120602
## iter 90 value 155.106135
## iter 100 value 155.101868
## final value 155.101868
## stopped after 100 iterations
## # weights: 91
## initial value 313.307181
## iter 10 value 207.030414
## iter 20 value 162.092554
## iter 30 value 146.542503
## iter 40 value 138.103070
## iter 50 value 134.365391
```

```
## iter 60 value 129.001656
## iter 70 value 126.005289
## iter 80 value 124.821056
## iter 90 value 123.678070
## iter 100 value 123.013703
## final value 123.013703
## stopped after 100 iterations
## # weights: 11
## initial value 345.812496
## iter 10 value 228.271975
## iter 20 value 224.686137
## iter 30 value 220.108306
## iter 40 value 218.235034
## iter 50 value 218.036818
## iter 60 value 218.004565
## final value 217.996720
## converged
## # weights: 31
## initial value 325.007022
## iter 10 value 217.220203
## iter 20 value 204.588396
## iter 30 value 192.411066
## iter 40 value 189.447043
## iter 50 value 184.861214
## iter 60 value 183.456896
## iter 70 value 183.234380
## iter 80 value 182.772273
## iter 90 value 182.403539
## iter 100 value 182.287709
## final value 182.287709
## stopped after 100 iterations
## # weights: 51
## initial value 365.024941
## iter 10 value 209.656017
## iter 20 value 191.319162
## iter 30 value 186.613091
## iter 40 value 181.940532
## iter 50 value 173.354238
## iter 60 value 169.242014
## iter 70 value 167.687112
## iter 80 value 167.031480
## iter 90 value 166.924012
## iter 100 value 166.865920
## final value 166.865920
## stopped after 100 iterations
## # weights: 71
## initial value 305.336543
## iter 10 value 206.768114
## iter 20 value 177.219175
## iter 30 value 157.672807
## iter 40 value 147.683197
## iter 50 value 145.163420
## iter 60 value 144.618851
## iter 70 value 144.257368
```

```
## iter 80 value 143.792802
## iter 90 value 143.640237
## iter 100 value 143.528795
## final value 143.528795
## stopped after 100 iterations
## # weights: 91
## initial value 331.978552
## iter 10 value 204.348549
## iter 20 value 175.554749
## iter 30 value 136.156286
## iter 40 value 128.126167
## iter 50 value 122.451160
## iter 60 value 120.361754
## iter 70 value 118.785356
## iter 80 value 117.438306
## iter 90 value 115.455645
## iter 100 value 115.099621
## final value 115.099621
## stopped after 100 iterations
## # weights: 11
## initial value 317.537986
## iter 10 value 226.869200
## iter 20 value 220.330856
## iter 30 value 218.394808
## iter 40 value 217.981592
## iter 50 value 217.886986
## iter 60 value 217.882955
## iter 70 value 217.862770
## final value 217.862528
## converged
## # weights: 31
## initial value 369.544969
## iter 10 value 209.253497
## iter 20 value 196.457726
## iter 30 value 193.608864
## iter 40 value 189.509820
## iter 50 value 186.575599
## iter 60 value 186.295268
## iter 70 value 186.216043
## iter 80 value 186.106414
## iter 90 value 185.773552
## iter 100 value 185.697263
## final value 185.697263
## stopped after 100 iterations
## # weights: 51
## initial value 421.109892
## iter 10 value 207.741378
## iter 20 value 179.186582
## iter 30 value 167.579231
## iter 40 value 163.796789
## iter 50 value 160.918490
## iter 60 value 152.345218
## iter 70 value 150.749712
## iter 80 value 149.953686
```

```
## iter 90 value 149.876776
## iter 100 value 149.818620
## final value 149.818620
## stopped after 100 iterations
## # weights: 71
## initial value 352.611417
## iter 10 value 201.813082
## iter 20 value 168.694662
## iter 30 value 158.193746
## iter 40 value 146.335327
## iter 50 value 133.622983
## iter 60 value 130.796208
## iter 70 value 126.898882
## iter 80 value 121.029959
## iter 90 value 117.336561
## iter 100 value 116.050676
## final value 116.050676
## stopped after 100 iterations
## # weights: 91
## initial value 352.046592
## iter 10 value 211.016317
## iter 20 value 169.043555
## iter 30 value 136.884094
## iter 40 value 110.561389
## iter 50 value 101.254596
## iter 60 value 97.521090
## iter 70 value 95.795411
## iter 80 value 91.705130
## iter 90 value 86.432186
## iter 100 value 85.204904
## final value 85.204904
## stopped after 100 iterations
## # weights: 11
## initial value 311.870321
## iter 10 value 213.974642
## iter 20 value 212.676799
## final value 212.670105
## converged
## # weights: 31
## initial value 355.272677
## iter 10 value 208.837898
## iter 20 value 198.476591
## iter 30 value 193.997001
## iter 40 value 187.726127
## iter 50 value 184.116136
## iter 60 value 180.647444
## iter 70 value 176.333812
## iter 80 value 175.742203
## iter 90 value 175.544669
## iter 100 value 174.742672
## final value 174.742672
## stopped after 100 iterations
## # weights: 51
## initial value 386.328733
```



```
## iter 10 value 217.596555
## iter 20 value 192.892205
## iter 30 value 172.918584
## iter 40 value 161.627679
## iter 50 value 159.096599
## iter 60 value 154.990247
## iter 70 value 151.876100
## iter 80 value 149.606581
## iter 90 value 147.190011
## iter 100 value 144.440045
## final value 144.440045
## stopped after 100 iterations
## # weights: 71
## initial value 303.638579
## iter 10 value 194.740913
## iter 20 value 160.548811
## iter 30 value 134.860595
## iter 40 value 120.459136
## iter 50 value 116.088941
## iter 60 value 112.819088
## iter 70 value 107.878678
## iter 80 value 99.117370
## iter 90 value 96.479016
## iter 100 value 96.184993
## final value 96.184993
## stopped after 100 iterations
## # weights: 91
## initial value 580.742188
## iter 10 value 194.787438
## iter 20 value 159.110607
## iter 30 value 136.598364
## iter 40 value 117.120690
## iter 50 value 103.975044
## iter 60 value 92.064531
## iter 70 value 88.482437
## iter 80 value 86.984706
## iter 90 value 86.063462
## iter 100 value 85.800332
## final value 85.800332
## stopped after 100 iterations
## # weights: 11
## initial value 320.013268
## iter 10 value 225.843653
## iter 20 value 217.888490
## iter 30 value 216.416888
## final value 216.327355
## converged
## # weights: 31
## initial value 342.493436
## iter 10 value 227.281861
## iter 20 value 210.988470
## iter 30 value 206.196432
## iter 40 value 204.354484
## iter 50 value 204.116266
```

```
## iter 60 value 204.113533
## final value 204.113521
## converged
## # weights: 51
## initial value 317.115588
## iter 10 value 209.066316
## iter 20 value 195.819281
## iter 30 value 191.922002
## iter 40 value 190.907865
## iter 50 value 190.666134
## iter 60 value 188.460339
## iter 70 value 188.168175
## iter 80 value 188.160358
## iter 90 value 188.159610
## final value 188.159586
## converged
## # weights: 71
## initial value 351.802785
## iter 10 value 223.762233
## iter 20 value 204.819837
## iter 30 value 193.581715
## iter 40 value 181.752165
## iter 50 value 174.722471
## iter 60 value 171.881500
## iter 70 value 171.210467
## iter 80 value 170.682962
## iter 90 value 170.140025
## iter 100 value 170.020272
## final value 170.020272
## stopped after 100 iterations
## # weights: 91
## initial value 325.653829
## iter 10 value 230.199910
## iter 20 value 210.319898
## iter 30 value 195.642733
## iter 40 value 186.925522
## iter 50 value 181.398242
## iter 60 value 175.795673
## iter 70 value 171.783399
## iter 80 value 170.043335
## iter 90 value 169.168830
## iter 100 value 168.085566
## final value 168.085566
## stopped after 100 iterations
## # weights: 11
## initial value 316.429608
## iter 10 value 277.828700
## iter 20 value 233.094793
## iter 30 value 227.640380
## iter 40 value 224.761958
## iter 50 value 221.597747
## iter 60 value 214.150154
## iter 70 value 213.277312
## final value 213.216543
```

```
## converged
## # weights: 31
## initial value 364.953838
## iter 10 value 204.543825
## iter 20 value 197.877844
## iter 30 value 194.292862
## iter 40 value 192.986481
## iter 50 value 192.297616
## iter 60 value 192.185189
## final value 192.184947
## converged
## # weights: 51
## initial value 487.664970
## iter 10 value 208.072759
## iter 20 value 181.001118
## iter 30 value 170.162886
## iter 40 value 166.821184
## iter 50 value 165.744227
## iter 60 value 165.494612
## iter 70 value 164.597847
## iter 80 value 163.506927
## iter 90 value 162.374422
## iter 100 value 162.062364
## final value 162.062364
## stopped after 100 iterations
## # weights: 71
## initial value 637.898131
## iter 10 value 226.120950
## iter 20 value 197.302559
## iter 30 value 180.361849
## iter 40 value 167.248779
## iter 50 value 158.045880
## iter 60 value 149.337692
## iter 70 value 145.391946
## iter 80 value 140.864822
## iter 90 value 139.456828
## iter 100 value 139.324860
## final value 139.324860
## stopped after 100 iterations
## # weights: 91
## initial value 326.298274
## iter 10 value 212.754149
## iter 20 value 181.300053
## iter 30 value 152.389191
## iter 40 value 135.362132
## iter 50 value 132.854093
## iter 60 value 131.707297
## iter 70 value 131.203362
## iter 80 value 128.339015
## iter 90 value 128.041863
## iter 100 value 127.927002
## final value 127.927002
## stopped after 100 iterations
## # weights: 11
```

```
## initial value 322.413094
## iter 10 value 216.865456
## iter 20 value 212.853928
## final value 212.726978
## converged
## # weights: 31
## initial value 315.729387
## iter 10 value 207.698156
## iter 20 value 193.673954
## iter 30 value 187.862453
## iter 40 value 184.249962
## iter 50 value 183.867339
## iter 60 value 183.805518
## iter 70 value 183.692653
## iter 80 value 183.686375
## iter 90 value 183.672112
## iter 100 value 183.671672
## final value 183.671672
## stopped after 100 iterations
## # weights: 51
## initial value 402.280813
## iter 10 value 193.525982
## iter 20 value 171.458231
## iter 30 value 167.906957
## iter 40 value 165.022736
## iter 50 value 163.019658
## iter 60 value 162.562835
## iter 70 value 162.005769
## iter 80 value 161.727508
## iter 90 value 161.533487
## iter 100 value 161.435826
## final value 161.435826
## stopped after 100 iterations
## # weights: 71
## initial value 379.907988
## iter 10 value 211.661124
## iter 20 value 186.791943
## iter 30 value 173.028350
## iter 40 value 160.831199
## iter 50 value 154.306428
## iter 60 value 151.257909
## iter 70 value 150.940683
## iter 80 value 150.716366
## iter 90 value 150.665613
## iter 100 value 150.652792
## final value 150.652792
## stopped after 100 iterations
## # weights: 91
## initial value 357.100285
## iter 10 value 200.333181
## iter 20 value 154.874534
## iter 30 value 132.026252
## iter 40 value 116.451228
## iter 50 value 109.887383
```

```
## iter 60 value 108.801678
## iter 70 value 108.066798
## iter 80 value 107.548261
## iter 90 value 107.288704
## iter 100 value 107.227659
## final value 107.227659
## stopped after 100 iterations
## # weights: 11
## initial value 347.969129
## iter 10 value 237.087359
## iter 20 value 217.136055
## iter 30 value 213.627532
## iter 40 value 212.676265
## final value 212.675819
## converged
## # weights: 31
## initial value 328.892002
## iter 10 value 207.026108
## iter 20 value 190.195926
## iter 30 value 183.590230
## iter 40 value 180.991054
## iter 50 value 174.878283
## iter 60 value 172.757377
## iter 70 value 172.636872
## iter 80 value 172.275515
## iter 90 value 171.012834
## iter 100 value 170.770019
## final value 170.770019
## stopped after 100 iterations
## # weights: 51
## initial value 366.381528
## iter 10 value 212.171544
## iter 20 value 186.262547
## iter 30 value 169.925556
## iter 40 value 156.478009
## iter 50 value 143.484804
## iter 60 value 139.383950
## iter 70 value 138.345617
## iter 80 value 137.952913
## iter 90 value 137.695927
## iter 100 value 137.502536
## final value 137.502536
## stopped after 100 iterations
## # weights: 71
## initial value 444.886526
## iter 10 value 200.396590
## iter 20 value 168.451870
## iter 30 value 150.300935
## iter 40 value 135.790496
## iter 50 value 129.017369
## iter 60 value 123.304432
## iter 70 value 121.149645
## iter 80 value 118.243786
## iter 90 value 116.446873
```

```
## iter 100 value 115.313890
## final value 115.313890
## stopped after 100 iterations
## # weights: 91
## initial value 389.213351
## iter 10 value 200.393105
## iter 20 value 172.449920
## iter 30 value 137.834679
## iter 40 value 116.292812
## iter 50 value 105.254472
## iter 60 value 94.686265
## iter 70 value 92.151894
## iter 80 value 90.178827
## iter 90 value 88.444698
## iter 100 value 87.972353
## final value 87.972353
## stopped after 100 iterations
## # weights: 11
## initial value 313.221929
## iter 10 value 222.570993
## iter 20 value 217.417637
## iter 30 value 217.234583
## final value 217.234475
## converged
## # weights: 31
## initial value 382.945777
## iter 10 value 209.460665
## iter 20 value 198.188871
## iter 30 value 190.791981
## iter 40 value 187.446991
## iter 50 value 183.130891
## iter 60 value 178.766755
## iter 70 value 178.412644
## iter 80 value 178.343871
## iter 90 value 178.321614
## iter 100 value 178.311527
## final value 178.311527
## stopped after 100 iterations
## # weights: 51
## initial value 411.502651
## iter 10 value 212.163624
## iter 20 value 197.635398
## iter 30 value 185.571696
## iter 40 value 176.393166
## iter 50 value 169.910135
## iter 60 value 162.429920
## iter 70 value 156.635429
## iter 80 value 154.153374
## iter 90 value 153.003954
## iter 100 value 152.487389
## final value 152.487389
## stopped after 100 iterations
## # weights: 71
## initial value 342.155749
```

```
## iter 10 value 205.413381
## iter 20 value 172.012037
## iter 30 value 151.603879
## iter 40 value 143.895056
## iter 50 value 134.393004
## iter 60 value 124.781230
## iter 70 value 120.766942
## iter 80 value 120.581997
## iter 90 value 120.577630
## final value 120.577621
## converged
## # weights: 91
## initial value 431.970090
## iter 10 value 207.912191
## iter 20 value 171.285898
## iter 30 value 135.045184
## iter 40 value 116.165236
## iter 50 value 108.898506
## iter 60 value 105.155422
## iter 70 value 98.380383
## iter 80 value 94.265954
## iter 90 value 93.859611
## iter 100 value 93.742238
## final value 93.742238
## stopped after 100 iterations
## # weights: 11
## initial value 309.169263
## iter 10 value 227.669738
## iter 20 value 221.413779
## iter 30 value 221.371751
## final value 221.371306
## converged
## # weights: 31
## initial value 327.163067
## iter 10 value 224.298352
## iter 20 value 210.565003
## iter 30 value 209.374594
## iter 40 value 209.005659
## iter 50 value 208.694566
## iter 60 value 208.661414
## final value 208.659917
## converged
## # weights: 51
## initial value 327.194675
## iter 10 value 215.357361
## iter 20 value 202.093324
## iter 30 value 196.436431
## iter 40 value 191.039008
## iter 50 value 189.119545
## iter 60 value 188.216528
## iter 70 value 186.699169
## iter 80 value 185.359707
## iter 90 value 185.235803
## iter 100 value 185.224455
```

```
## final value 185.224455
## stopped after 100 iterations
## # weights: 71
## initial value 324.490832
## iter 10 value 213.087524
## iter 20 value 201.592461
## iter 30 value 192.769099
## iter 40 value 188.441351
## iter 50 value 186.510738
## iter 60 value 185.925361
## iter 70 value 185.778995
## iter 80 value 185.731487
## iter 90 value 185.722514
## iter 100 value 185.721917
## final value 185.721917
## stopped after 100 iterations
## # weights: 91
## initial value 381.096388
## iter 10 value 214.256753
## iter 20 value 196.956116
## iter 30 value 189.685802
## iter 40 value 183.549078
## iter 50 value 180.793624
## iter 60 value 178.952874
## iter 70 value 176.648522
## iter 80 value 175.193246
## iter 90 value 173.883890
## iter 100 value 172.302710
## final value 172.302710
## stopped after 100 iterations
## # weights: 11
## initial value 339.976559
## iter 10 value 228.609896
## iter 20 value 225.363976
## iter 30 value 218.248119
## iter 40 value 217.625030
## iter 50 value 217.620041
## final value 217.619916
## converged
## # weights: 31
## initial value 323.558373
## iter 10 value 237.015775
## iter 20 value 209.468921
## iter 30 value 202.223630
## iter 40 value 200.936049
## iter 50 value 199.198686
## iter 60 value 198.240132
## iter 70 value 197.838546
## iter 80 value 197.800702
## iter 90 value 197.777872
## final value 197.777590
## converged
## # weights: 51
## initial value 339.679261
```



```
## iter 10 value 212.265906
## iter 20 value 190.170701
## iter 30 value 182.020348
## iter 40 value 177.401428
## iter 50 value 175.147769
## iter 60 value 174.478250
## iter 70 value 174.226673
## iter 80 value 173.873321
## iter 90 value 173.815926
## iter 100 value 173.809852
## final value 173.809852
## stopped after 100 iterations
## # weights: 71
## initial value 322.466518
## iter 10 value 209.574966
## iter 20 value 179.906497
## iter 30 value 162.577960
## iter 40 value 158.312712
## iter 50 value 157.135466
## iter 60 value 154.223626
## iter 70 value 153.550726
## iter 80 value 153.269771
## iter 90 value 153.041096
## iter 100 value 152.931962
## final value 152.931962
## stopped after 100 iterations
## # weights: 91
## initial value 339.568579
## iter 10 value 208.177038
## iter 20 value 184.942084
## iter 30 value 166.545483
## iter 40 value 149.164592
## iter 50 value 143.579586
## iter 60 value 140.747527
## iter 70 value 139.305938
## iter 80 value 138.331081
## iter 90 value 138.157481
## iter 100 value 137.214305
## final value 137.214305
## stopped after 100 iterations
## # weights: 11
## initial value 330.162087
## iter 10 value 229.468071
## iter 20 value 225.301762
## iter 30 value 218.510564
## iter 40 value 217.280652
## final value 217.274047
## converged
## # weights: 31
## initial value 322.086017
## iter 10 value 221.392776
## iter 20 value 201.549606
## iter 30 value 195.326567
## iter 40 value 193.870474
```

```
## iter 50 value 192.162448
## iter 60 value 190.233054
## iter 70 value 189.999526
## iter 80 value 189.507499
## iter 90 value 188.812256
## iter 100 value 188.454030
## final value 188.454030
## stopped after 100 iterations
## # weights: 51
## initial value 410.488848
## iter 10 value 199.232964
## iter 20 value 172.518569
## iter 30 value 163.519049
## iter 40 value 150.235486
## iter 50 value 148.232038
## iter 60 value 146.374973
## iter 70 value 144.632275
## iter 80 value 143.676874
## iter 90 value 142.176470
## iter 100 value 141.328860
## final value 141.328860
## stopped after 100 iterations
## # weights: 71
## initial value 473.516605
## iter 10 value 201.460163
## iter 20 value 174.336680
## iter 30 value 152.760826
## iter 40 value 145.047462
## iter 50 value 141.622278
## iter 60 value 136.517082
## iter 70 value 135.137912
## iter 80 value 134.018454
## iter 90 value 133.902318
## iter 100 value 133.814255
## final value 133.814255
## stopped after 100 iterations
## # weights: 91
## initial value 378.011143
## iter 10 value 206.428238
## iter 20 value 169.955299
## iter 30 value 140.422451
## iter 40 value 130.481855
## iter 50 value 122.717915
## iter 60 value 119.338091
## iter 70 value 118.667162
## iter 80 value 118.260656
## iter 90 value 118.093550
## iter 100 value 118.068466
## final value 118.068466
## stopped after 100 iterations
## # weights: 11
## initial value 326.646340
## iter 10 value 237.499176
## iter 20 value 217.650142
```

```
## iter 30 value 217.241673
## final value 217.238432
## converged
## # weights: 31
## initial value 356.052332
## iter 10 value 214.041931
## iter 20 value 202.781390
## iter 30 value 200.104233
## iter 40 value 197.440337
## iter 50 value 194.519327
## iter 60 value 192.651312
## iter 70 value 192.496214
## iter 80 value 192.292551
## iter 90 value 192.140071
## iter 100 value 192.013009
## final value 192.013009
## stopped after 100 iterations
## # weights: 51
## initial value 339.797073
## iter 10 value 206.610603
## iter 20 value 178.773775
## iter 30 value 164.883402
## iter 40 value 158.182869
## iter 50 value 153.262440
## iter 60 value 152.412067
## iter 70 value 152.261657
## iter 80 value 152.121379
## iter 90 value 151.420549
## iter 100 value 150.603379
## final value 150.603379
## stopped after 100 iterations
## # weights: 71
## initial value 346.055219
## iter 10 value 214.773623
## iter 20 value 180.616204
## iter 30 value 166.426919
## iter 40 value 154.592103
## iter 50 value 146.649993
## iter 60 value 139.078319
## iter 70 value 132.355374
## iter 80 value 128.871496
## iter 90 value 127.044213
## iter 100 value 126.326894
## final value 126.326894
## stopped after 100 iterations
## # weights: 91
## initial value 375.715901
## iter 10 value 209.328815
## iter 20 value 161.873459
## iter 30 value 139.205183
## iter 40 value 127.981881
## iter 50 value 117.644376
## iter 60 value 108.213106
## iter 70 value 106.527512
```

```
## iter 80 value 105.397387
## iter 90 value 105.101505
## iter 100 value 104.993505
## final value 104.993505
## stopped after 100 iterations
## # weights: 11
## initial value 320.021934
## iter 10 value 223.973375
## iter 20 value 216.617562
## iter 30 value 213.912195
## iter 40 value 213.608339
## final value 213.608071
## converged
## # weights: 31
## initial value 335.769389
## iter 10 value 214.402604
## iter 20 value 200.357565
## iter 30 value 191.911637
## iter 40 value 181.980759
## iter 50 value 175.753637
## iter 60 value 175.473366
## iter 70 value 175.230858
## iter 80 value 174.567671
## iter 90 value 174.508382
## iter 100 value 174.484137
## final value 174.484137
## stopped after 100 iterations
## # weights: 51
## initial value 323.408090
## iter 10 value 209.760658
## iter 20 value 188.486096
## iter 30 value 180.386310
## iter 40 value 171.305663
## iter 50 value 161.061821
## iter 60 value 153.617210
## iter 70 value 150.480564
## iter 80 value 150.241335
## final value 150.241065
## converged
## # weights: 71
## initial value 417.519218
## iter 10 value 208.974081
## iter 20 value 184.120511
## iter 30 value 161.458981
## iter 40 value 152.417669
## iter 50 value 147.496817
## iter 60 value 140.642564
## iter 70 value 134.703784
## iter 80 value 131.381591
## iter 90 value 127.187923
## iter 100 value 125.865470
## final value 125.865470
## stopped after 100 iterations
## # weights: 91
```

```
## initial value 296.978369
## iter 10 value 202.550217
## iter 20 value 180.708111
## iter 30 value 146.390962
## iter 40 value 128.600880
## iter 50 value 116.941387
## iter 60 value 105.282065
## iter 70 value 96.819092
## iter 80 value 92.538267
## iter 90 value 89.142777
## iter 100 value 86.229820
## final value 86.229820
## stopped after 100 iterations
## # weights: 11
## initial value 318.047366
## iter 10 value 220.752615
## iter 20 value 218.008124
## final value 218.004957
## converged
## # weights: 31
## initial value 314.911725
## iter 10 value 211.861440
## iter 20 value 207.984079
## iter 30 value 204.983043
## iter 40 value 200.429723
## iter 50 value 200.137245
## iter 60 value 200.127805
## iter 60 value 200.127803
## iter 60 value 200.127803
## final value 200.127803
## converged
## # weights: 51
## initial value 401.360435
## iter 10 value 236.884260
## iter 20 value 206.983590
## iter 30 value 201.092039
## iter 40 value 195.764474
## iter 50 value 192.033230
## iter 60 value 187.708965
## iter 70 value 186.937631
## iter 80 value 186.864518
## iter 90 value 186.844067
## iter 100 value 186.843010
## final value 186.843010
## stopped after 100 iterations
## # weights: 71
## initial value 344.680353
## iter 10 value 219.531829
## iter 20 value 203.311077
## iter 30 value 192.742575
## iter 40 value 185.896907
## iter 50 value 184.286804
## iter 60 value 183.678899
## iter 70 value 183.421605
```

```
## iter 80 value 182.592869
## iter 90 value 182.451271
## iter 100 value 182.436325
## final value 182.436325
## stopped after 100 iterations
## # weights: 91
## initial value 453.054768
## iter 10 value 222.621431
## iter 20 value 194.665560
## iter 30 value 183.114470
## iter 40 value 180.694961
## iter 50 value 178.383856
## iter 60 value 176.407296
## iter 70 value 172.958984
## iter 80 value 172.351514
## iter 90 value 172.174462
## iter 100 value 172.009344
## final value 172.009344
## stopped after 100 iterations
## # weights: 11
## initial value 344.933261
## iter 10 value 227.592410
## iter 20 value 214.786749
## iter 30 value 214.076361
## final value 214.031903
## converged
## # weights: 31
## initial value 377.128568
## iter 10 value 211.805686
## iter 20 value 196.207406
## iter 30 value 191.400189
## iter 40 value 190.928492
## iter 50 value 189.950459
## iter 60 value 188.855223
## iter 70 value 188.707531
## iter 80 value 188.667393
## iter 90 value 188.652912
## final value 188.652604
## converged
## # weights: 51
## initial value 400.771235
## iter 10 value 204.431413
## iter 20 value 189.123298
## iter 30 value 180.665644
## iter 40 value 178.297241
## iter 50 value 174.989086
## iter 60 value 173.599051
## iter 70 value 172.791544
## iter 80 value 172.259549
## iter 90 value 171.933199
## iter 100 value 171.698561
## final value 171.698561
## stopped after 100 iterations
## # weights: 71
```

```
## initial value 427.905179
## iter 10 value 214.814794
## iter 20 value 179.688159
## iter 30 value 160.734485
## iter 40 value 156.266170
## iter 50 value 153.397031
## iter 60 value 151.924440
## iter 70 value 151.443124
## iter 80 value 150.586832
## iter 90 value 149.408824
## iter 100 value 148.386726
## final value 148.386726
## stopped after 100 iterations
## # weights: 91
## initial value 350.026683
## iter 10 value 206.713052
## iter 20 value 177.536418
## iter 30 value 155.361327
## iter 40 value 148.221776
## iter 50 value 145.993714
## iter 60 value 144.865785
## iter 70 value 143.944855
## iter 80 value 142.671206
## iter 90 value 141.141487
## iter 100 value 140.745864
## final value 140.745864
## stopped after 100 iterations
## # weights: 11
## initial value 394.430068
## iter 10 value 221.920937
## iter 20 value 214.941201
## iter 30 value 213.793675
## iter 40 value 213.652068
## final value 213.652063
## converged
## # weights: 31
## initial value 323.650092
## iter 10 value 217.209424
## iter 20 value 204.231987
## iter 30 value 199.953800
## iter 40 value 198.361485
## iter 50 value 196.184517
## iter 60 value 192.366200
## iter 70 value 191.346762
## iter 80 value 191.024249
## iter 90 value 190.989450
## iter 100 value 190.986709
## final value 190.986709
## stopped after 100 iterations
## # weights: 51
## initial value 309.359923
## iter 10 value 208.005562
## iter 20 value 185.269169
## iter 30 value 170.363856
```

```
## iter 40 value 163.559775
## iter 50 value 156.712336
## iter 60 value 153.784868
## iter 70 value 152.268223
## iter 80 value 151.558686
## iter 90 value 150.676222
## iter 100 value 150.014099
## final value 150.014099
## stopped after 100 iterations
## # weights: 71
## initial value 314.955410
## iter 10 value 204.807558
## iter 20 value 175.468183
## iter 30 value 159.871983
## iter 40 value 153.218000
## iter 50 value 150.464644
## iter 60 value 149.687810
## iter 70 value 149.221350
## iter 80 value 148.860887
## iter 90 value 148.794152
## iter 100 value 148.744047
## final value 148.744047
## stopped after 100 iterations
## # weights: 91
## initial value 375.740351
## iter 10 value 207.508428
## iter 20 value 164.638052
## iter 30 value 134.183844
## iter 40 value 120.440594
## iter 50 value 114.082629
## iter 60 value 111.466321
## iter 70 value 110.665845
## iter 80 value 110.097960
## iter 90 value 109.920761
## iter 100 value 109.871276
## final value 109.871276
## stopped after 100 iterations
## # weights: 11
## initial value 323.849611
## iter 10 value 228.844292
## iter 20 value 224.140837
## iter 30 value 215.045315
## iter 40 value 213.617912
## iter 50 value 213.612711
## final value 213.612489
## converged
## # weights: 31
## initial value 318.483337
## iter 10 value 210.002438
## iter 20 value 193.943963
## iter 30 value 189.432761
## iter 40 value 184.479692
## iter 50 value 181.072336
## iter 60 value 180.642650
```



```
## iter 70 value 180.572156
## iter 80 value 180.443266
## iter 90 value 180.349678
## iter 100 value 180.161892
## final value 180.161892
## stopped after 100 iterations
## # weights: 51
## initial value 326.395355
## iter 10 value 212.306947
## iter 20 value 194.616465
## iter 30 value 176.394878
## iter 40 value 166.421785
## iter 50 value 157.566096
## iter 60 value 154.329329
## iter 70 value 154.051163
## iter 80 value 153.934169
## iter 90 value 153.855767
## iter 100 value 153.441888
## final value 153.441888
## stopped after 100 iterations
## # weights: 71
## initial value 386.523270
## iter 10 value 211.783287
## iter 20 value 180.896193
## iter 30 value 154.600547
## iter 40 value 135.588024
## iter 50 value 126.427647
## iter 60 value 123.044203
## iter 70 value 121.245321
## iter 80 value 119.481000
## iter 90 value 118.337139
## iter 100 value 117.132144
## final value 117.132144
## stopped after 100 iterations
## # weights: 91
## initial value 385.346908
## iter 10 value 196.381422
## iter 20 value 171.357150
## iter 30 value 152.234494
## iter 40 value 138.257358
## iter 50 value 124.829835
## iter 60 value 122.510780
## iter 70 value 121.102618
## iter 80 value 120.599249
## iter 90 value 120.416322
## iter 100 value 119.913710
## final value 119.913710
## stopped after 100 iterations
## # weights: 11
## initial value 318.295455
## iter 10 value 227.562171
## iter 20 value 223.349262
## iter 30 value 223.312743
## final value 223.308895
```

```
## converged
## # weights:  31
## initial  value 451.633889
## iter   10 value 235.644246
## iter   20 value 219.734149
## iter   30 value 206.080766
## iter   40 value 200.567563
## iter   50 value 193.367096
## iter   60 value 191.422833
## iter   70 value 190.757798
## iter   80 value 190.027319
## iter   90 value 189.372770
## iter  100 value 189.293793
## final   value 189.293793
## stopped after 100 iterations
## # weights:  51
## initial  value 380.752680
## iter   10 value 209.211198
## iter   20 value 185.689289
## iter   30 value 175.451003
## iter   40 value 167.788675
## iter   50 value 162.595132
## iter   60 value 157.172140
## iter   70 value 145.053148
## iter   80 value 141.230213
## iter   90 value 139.976602
## iter  100 value 139.906633
## final   value 139.906633
## stopped after 100 iterations
## # weights:  71
## initial  value 302.077923
## iter   10 value 206.662705
## iter   20 value 174.519752
## iter   30 value 154.071280
## iter   40 value 145.513435
## iter   50 value 137.264957
## iter   60 value 125.082395
## iter   70 value 116.028481
## iter   80 value 113.881194
## iter   90 value 113.717940
## iter  100 value 113.702646
## final   value 113.702646
## stopped after 100 iterations
## # weights:  91
## initial  value 316.575972
## iter   10 value 213.910278
## iter   20 value 188.564136
## iter   30 value 151.609371
## iter   40 value 137.157481
## iter   50 value 115.514623
## iter   60 value 103.643750
## iter   70 value 95.856428
## iter   80 value 88.260846
## iter   90 value 83.467830
```

```
## iter 100 value 82.269413
## final value 82.269413
## stopped after 100 iterations
## # weights: 11
## initial value 320.276172
## iter 10 value 229.185696
## iter 20 value 226.838079
## iter 30 value 226.782465
## final value 226.782373
## converged
## # weights: 31
## initial value 328.932780
## iter 10 value 222.766326
## iter 20 value 212.027300
## iter 30 value 208.260987
## iter 40 value 206.208701
## iter 50 value 205.242955
## iter 60 value 205.168209
## iter 70 value 205.159539
## iter 80 value 205.159213
## final value 205.159204
## converged
## # weights: 51
## initial value 408.919196
## iter 10 value 217.491496
## iter 20 value 201.988050
## iter 30 value 197.588488
## iter 40 value 195.867024
## iter 50 value 195.180488
## iter 60 value 194.972555
## iter 70 value 194.938019
## final value 194.937597
## converged
## # weights: 71
## initial value 327.314774
## iter 10 value 220.592767
## iter 20 value 199.199480
## iter 30 value 190.650528
## iter 40 value 185.930064
## iter 50 value 181.442591
## iter 60 value 179.242564
## iter 70 value 178.898925
## iter 80 value 178.801034
## iter 90 value 178.767028
## final value 178.766415
## converged
## # weights: 91
## initial value 319.292552
## iter 10 value 216.905873
## iter 20 value 201.560819
## iter 30 value 186.792724
## iter 40 value 179.524873
## iter 50 value 173.120760
## iter 60 value 171.668649
```

```
## iter 70 value 171.056703
## iter 80 value 170.743605
## iter 90 value 169.816403
## iter 100 value 168.099119
## final value 168.099119
## stopped after 100 iterations
## # weights: 11
## initial value 312.216694
## iter 10 value 235.579066
## iter 20 value 235.056771
## iter 30 value 234.937433
## iter 40 value 231.539790
## iter 50 value 224.689910
## iter 60 value 223.730439
## final value 223.729952
## converged
## # weights: 31
## initial value 332.451752
## iter 10 value 222.360505
## iter 20 value 210.133352
## iter 30 value 203.850589
## iter 40 value 202.235514
## iter 50 value 201.441278
## iter 60 value 200.589940
## iter 70 value 200.522391
## iter 80 value 200.481147
## iter 90 value 200.465869
## iter 100 value 200.464021
## final value 200.464021
## stopped after 100 iterations
## # weights: 51
## initial value 485.862545
## iter 10 value 223.156117
## iter 20 value 201.440320
## iter 30 value 192.569679
## iter 40 value 186.579543
## iter 50 value 182.442691
## iter 60 value 180.932528
## iter 70 value 180.624968
## iter 80 value 180.316354
## iter 90 value 179.257440
## iter 100 value 177.109929
## final value 177.109929
## stopped after 100 iterations
## # weights: 71
## initial value 423.985040
## iter 10 value 209.701228
## iter 20 value 188.149097
## iter 30 value 169.246488
## iter 40 value 158.982052
## iter 50 value 153.781493
## iter 60 value 150.494861
## iter 70 value 149.661237
## iter 80 value 149.231005
```

```
## iter 90 value 148.497742
## iter 100 value 147.985105
## final value 147.985105
## stopped after 100 iterations
## # weights: 91
## initial value 363.195678
## iter 10 value 219.515428
## iter 20 value 188.922183
## iter 30 value 168.953602
## iter 40 value 153.139605
## iter 50 value 144.959412
## iter 60 value 142.382255
## iter 70 value 141.274686
## iter 80 value 140.494785
## iter 90 value 139.763497
## iter 100 value 138.477515
## final value 138.477515
## stopped after 100 iterations
## # weights: 11
## initial value 303.119040
## iter 10 value 233.966729
## iter 20 value 224.626904
## iter 30 value 223.616647
## iter 40 value 223.352675
## final value 223.352652
## converged
## # weights: 31
## initial value 407.914373
## iter 10 value 224.934799
## iter 20 value 210.071552
## iter 30 value 201.476595
## iter 40 value 196.236847
## iter 50 value 195.176211
## iter 60 value 194.879060
## iter 70 value 194.854478
## iter 80 value 194.763756
## iter 90 value 194.723516
## iter 100 value 194.676340
## final value 194.676340
## stopped after 100 iterations
## # weights: 51
## initial value 320.875231
## iter 10 value 217.987693
## iter 20 value 202.613032
## iter 30 value 185.209493
## iter 40 value 178.608648
## iter 50 value 169.711371
## iter 60 value 166.265264
## iter 70 value 164.361846
## iter 80 value 163.587850
## iter 90 value 163.525323
## iter 100 value 163.504706
## final value 163.504706
## stopped after 100 iterations
```

```
## # weights: 71
## initial value 303.008883
## iter 10 value 212.556157
## iter 20 value 185.998718
## iter 30 value 165.139439
## iter 40 value 150.912916
## iter 50 value 146.054077
## iter 60 value 143.882452
## iter 70 value 141.216061
## iter 80 value 138.515560
## iter 90 value 135.361863
## iter 100 value 134.546884
## final value 134.546884
## stopped after 100 iterations
## # weights: 91
## initial value 334.555358
## iter 10 value 204.226020
## iter 20 value 171.305896
## iter 30 value 144.007912
## iter 40 value 121.725325
## iter 50 value 115.193466
## iter 60 value 112.136745
## iter 70 value 110.939838
## iter 80 value 110.065945
## iter 90 value 109.502551
## iter 100 value 108.311097
## final value 108.311097
## stopped after 100 iterations
## # weights: 11
## initial value 313.785704
## iter 10 value 237.022732
## iter 20 value 223.403041
## iter 30 value 223.336977
## final value 223.314821
## converged
## # weights: 31
## initial value 406.655904
## iter 10 value 228.399987
## iter 20 value 217.676798
## iter 30 value 209.446829
## iter 40 value 202.045621
## iter 50 value 198.589237
## iter 60 value 193.782618
## iter 70 value 192.644376
## iter 80 value 192.430481
## iter 90 value 192.022198
## iter 100 value 191.667374
## final value 191.667374
## stopped after 100 iterations
## # weights: 51
## initial value 317.068598
## iter 10 value 210.711269
## iter 20 value 181.225470
## iter 30 value 163.418883
```

```
## iter 40 value 158.370658
## iter 50 value 151.126939
## iter 60 value 148.976852
## iter 70 value 148.847549
## iter 80 value 148.642106
## iter 90 value 148.437160
## iter 100 value 148.126045
## final value 148.126045
## stopped after 100 iterations
## # weights: 71
## initial value 336.092533
## iter 10 value 212.853879
## iter 20 value 175.064837
## iter 30 value 151.403747
## iter 40 value 136.759765
## iter 50 value 124.527373
## iter 60 value 115.643512
## iter 70 value 111.660992
## iter 80 value 110.926748
## iter 90 value 110.448724
## iter 100 value 109.236631
## final value 109.236631
## stopped after 100 iterations
## # weights: 91
## initial value 342.509884
## iter 10 value 214.646714
## iter 20 value 176.975853
## iter 30 value 145.197895
## iter 40 value 121.679569
## iter 50 value 112.927017
## iter 60 value 108.870290
## iter 70 value 104.198213
## iter 80 value 102.307086
## iter 90 value 101.852273
## iter 100 value 101.666828
## final value 101.666828
## stopped after 100 iterations
## # weights: 11
## initial value 317.800362
## iter 10 value 223.985647
## iter 20 value 211.519067
## iter 30 value 210.171663
## iter 40 value 210.057988
## iter 40 value 210.057988
## iter 40 value 210.057988
## final value 210.057988
## converged
## # weights: 31
## initial value 366.198067
## iter 10 value 203.901257
## iter 20 value 197.125090
## iter 30 value 190.391036
## iter 40 value 181.393801
## iter 50 value 180.235777
```

```
## iter 60 value 180.232888
## iter 60 value 180.232886
## iter 60 value 180.232886
## final value 180.232886
## converged
## # weights: 51
## initial value 322.036769
## iter 10 value 203.960807
## iter 20 value 185.711119
## iter 30 value 166.920116
## iter 40 value 158.856137
## iter 50 value 143.553839
## iter 60 value 136.048380
## iter 70 value 134.799809
## iter 80 value 134.733120
## final value 134.727576
## converged
## # weights: 71
## initial value 349.348800
## iter 10 value 201.011802
## iter 20 value 172.245756
## iter 30 value 156.889795
## iter 40 value 142.284069
## iter 50 value 131.585015
## iter 60 value 118.599216
## iter 70 value 111.719049
## iter 80 value 111.268757
## iter 90 value 111.254686
## final value 111.254684
## converged
## # weights: 91
## initial value 443.102629
## iter 10 value 200.285831
## iter 20 value 162.905638
## iter 30 value 140.102977
## iter 40 value 127.768126
## iter 50 value 117.367801
## iter 60 value 109.531454
## iter 70 value 102.564019
## iter 80 value 92.594979
## iter 90 value 84.842857
## iter 100 value 78.277171
## final value 78.277171
## stopped after 100 iterations
## # weights: 11
## initial value 345.629986
## iter 10 value 236.470298
## iter 20 value 220.580318
## iter 30 value 214.071316
## final value 213.900149
## converged
## # weights: 31
## initial value 324.488107
## iter 10 value 231.861575
```



```
## iter 20 value 212.478069
## iter 30 value 204.782947
## iter 40 value 198.903857
## iter 50 value 196.292316
## iter 60 value 195.693489
## iter 70 value 195.480921
## iter 80 value 195.464956
## final value 195.464705
## converged
## # weights: 51
## initial value 409.610182
## iter 10 value 218.099259
## iter 20 value 196.792448
## iter 30 value 191.386378
## iter 40 value 189.865965
## iter 50 value 189.333847
## iter 60 value 188.791533
## iter 70 value 186.224472
## iter 80 value 185.571293
## iter 90 value 185.543917
## iter 100 value 185.542949
## final value 185.542949
## stopped after 100 iterations
## # weights: 71
## initial value 367.829111
## iter 10 value 208.178578
## iter 20 value 187.454313
## iter 30 value 179.160344
## iter 40 value 176.938881
## iter 50 value 176.077588
## iter 60 value 175.961351
## iter 70 value 175.651885
## iter 80 value 175.430005
## iter 90 value 175.372141
## iter 100 value 175.370192
## final value 175.370192
## stopped after 100 iterations
## # weights: 91
## initial value 320.566817
## iter 10 value 207.915659
## iter 20 value 195.552892
## iter 30 value 179.619411
## iter 40 value 173.025853
## iter 50 value 168.753863
## iter 60 value 167.638498
## iter 70 value 167.346269
## iter 80 value 166.654376
## iter 90 value 165.460587
## iter 100 value 165.135253
## final value 165.135253
## stopped after 100 iterations
## # weights: 11
## initial value 315.806984
## iter 10 value 219.327276
```

```
## iter 20 value 211.102097
## iter 30 value 210.672451
## final value 210.649469
## converged
## # weights: 31
## initial value 323.090026
## iter 10 value 216.184779
## iter 20 value 200.558808
## iter 30 value 196.330768
## iter 40 value 194.642792
## iter 50 value 194.231453
## iter 60 value 193.332714
## iter 70 value 193.030914
## iter 80 value 192.922595
## iter 90 value 192.888907
## iter 100 value 192.751030
## final value 192.751030
## stopped after 100 iterations
## # weights: 51
## initial value 313.565685
## iter 10 value 207.147253
## iter 20 value 185.112726
## iter 30 value 173.692572
## iter 40 value 166.483542
## iter 50 value 163.295062
## iter 60 value 162.359190
## iter 70 value 160.609530
## iter 80 value 159.935809
## iter 90 value 159.804657
## iter 100 value 159.780375
## final value 159.780375
## stopped after 100 iterations
## # weights: 71
## initial value 371.690248
## iter 10 value 207.430741
## iter 20 value 177.860746
## iter 30 value 172.079258
## iter 40 value 165.836180
## iter 50 value 164.067451
## iter 60 value 163.369676
## iter 70 value 163.291886
## iter 80 value 163.277409
## iter 90 value 163.276389
## iter 100 value 163.276257
## final value 163.276257
## stopped after 100 iterations
## # weights: 91
## initial value 493.377846
## iter 10 value 200.963816
## iter 20 value 168.547939
## iter 30 value 149.555937
## iter 40 value 133.884137
## iter 50 value 125.449534
## iter 60 value 122.200739
```

```
## iter 70 value 120.936205
## iter 80 value 120.563350
## iter 90 value 120.090901
## iter 100 value 117.152414
## final value 117.152414
## stopped after 100 iterations
## # weights: 11
## initial value 315.326256
## iter 10 value 224.765705
## iter 20 value 222.469940
## iter 30 value 214.135078
## iter 40 value 210.235107
## iter 50 value 210.106710
## final value 210.106199
## converged
## # weights: 31
## initial value 305.651647
## iter 10 value 210.293773
## iter 20 value 193.351394
## iter 30 value 187.935366
## iter 40 value 183.263409
## iter 50 value 181.206177
## iter 60 value 179.552150
## iter 70 value 179.530857
## iter 80 value 179.528237
## iter 90 value 179.527787
## final value 179.527104
## converged
## # weights: 51
## initial value 342.543130
## iter 10 value 203.630009
## iter 20 value 177.930647
## iter 30 value 159.445422
## iter 40 value 148.731087
## iter 50 value 143.921790
## iter 60 value 142.119742
## iter 70 value 141.754285
## iter 80 value 141.644445
## iter 90 value 141.553160
## iter 100 value 141.550839
## final value 141.550839
## stopped after 100 iterations
## # weights: 71
## initial value 325.847050
## iter 10 value 202.282046
## iter 20 value 174.034724
## iter 30 value 150.234865
## iter 40 value 133.537139
## iter 50 value 128.906936
## iter 60 value 126.769731
## iter 70 value 126.508948
## iter 80 value 126.294959
## iter 90 value 126.220416
## iter 100 value 126.193348
```

```
## final value 126.193348
## stopped after 100 iterations
## # weights: 91
## initial value 303.722990
## iter 10 value 203.317149
## iter 20 value 163.691444
## iter 30 value 125.028428
## iter 40 value 113.750244
## iter 50 value 108.103595
## iter 60 value 99.318461
## iter 70 value 97.198568
## iter 80 value 93.321336
## iter 90 value 87.875387
## iter 100 value 85.711402
## final value 85.711402
## stopped after 100 iterations
## # weights: 11
## initial value 352.741663
## iter 10 value 225.821806
## iter 20 value 221.853073
## iter 30 value 214.237083
## iter 40 value 210.347133
## iter 50 value 210.064947
## iter 60 value 210.063076
## final value 210.062831
## converged
## # weights: 31
## initial value 361.095952
## iter 10 value 212.250846
## iter 20 value 203.172063
## iter 30 value 196.776444
## iter 40 value 190.657771
## iter 50 value 185.387771
## iter 60 value 177.061999
## iter 70 value 174.169823
## iter 80 value 173.359360
## iter 90 value 172.833759
## iter 100 value 172.264532
## final value 172.264532
## stopped after 100 iterations
## # weights: 51
## initial value 380.154708
## iter 10 value 206.953543
## iter 20 value 184.960011
## iter 30 value 169.390326
## iter 40 value 161.975361
## iter 50 value 156.638730
## iter 60 value 151.188039
## iter 70 value 149.463018
## iter 80 value 148.516125
## iter 90 value 147.889123
## iter 100 value 146.755767
## final value 146.755767
## stopped after 100 iterations
```

```
## # weights:  71
## initial  value 356.958202
## iter   10 value 210.898096
## iter   20 value 191.991288
## iter   30 value 169.266301
## iter   40 value 154.760797
## iter   50 value 142.232532
## iter   60 value 135.141281
## iter   70 value 130.341705
## iter   80 value 125.057733
## iter   90 value 121.974350
## iter  100 value 120.563370
## final   value 120.563370
## stopped after 100 iterations
## # weights:  91
## initial  value 355.145241
## iter   10 value 201.958302
## iter   20 value 166.974821
## iter   30 value 143.258333
## iter   40 value 118.587401
## iter   50 value 110.266440
## iter   60 value 104.107987
## iter   70 value 102.038075
## iter   80 value 101.353986
## iter   90 value 101.115075
## iter  100 value 100.847382
## final   value 100.847382
## stopped after 100 iterations
## # weights:  11
## initial  value 375.913288
## iter   10 value 235.255845
## iter   20 value 230.749340
## iter   30 value 230.695868
## iter   40 value 230.192883
## iter   50 value 225.662211
## iter   60 value 225.230509
## iter   70 value 224.787949
## iter   80 value 224.541581
## iter   90 value 224.519319
## iter  100 value 224.517053
## final   value 224.517053
## stopped after 100 iterations
## # weights:  31
## initial  value 323.143818
## iter   10 value 219.387109
## iter   20 value 205.559348
## iter   30 value 198.948496
## iter   40 value 188.080757
## iter   50 value 184.689702
## iter   60 value 184.348213
## iter   70 value 184.322664
## iter   80 value 184.209536
## iter   90 value 184.202504
## iter  100 value 184.064583
```

```
## final value 184.064583
## stopped after 100 iterations
## # weights: 51
## initial value 325.879101
## iter 10 value 210.398823
## iter 20 value 183.041418
## iter 30 value 167.260549
## iter 40 value 155.443317
## iter 50 value 145.769798
## iter 60 value 141.156342
## iter 70 value 141.122439
## final value 141.122309
## converged
## # weights: 71
## initial value 333.543324
## iter 10 value 211.567687
## iter 20 value 180.339823
## iter 30 value 160.641263
## iter 40 value 147.226667
## iter 50 value 137.952058
## iter 60 value 132.189495
## iter 70 value 127.249250
## iter 80 value 125.647355
## iter 90 value 124.960245
## iter 100 value 123.868624
## final value 123.868624
## stopped after 100 iterations
## # weights: 91
## initial value 320.647092
## iter 10 value 203.648314
## iter 20 value 162.411577
## iter 30 value 129.125237
## iter 40 value 113.037928
## iter 50 value 102.171346
## iter 60 value 97.801074
## iter 70 value 88.644524
## iter 80 value 77.301368
## iter 90 value 75.157482
## iter 100 value 75.006112
## final value 75.006112
## stopped after 100 iterations
## # weights: 11
## initial value 323.222197
## iter 10 value 226.709155
## iter 20 value 224.547602
## iter 30 value 224.427265
## final value 224.427241
## converged
## # weights: 31
## initial value 330.936485
## iter 10 value 224.045834
## iter 20 value 213.085598
## iter 30 value 210.532286
## iter 40 value 208.426296
```

```
## iter 50 value 208.290420
## iter 60 value 208.288254
## final value 208.288150
## converged
## # weights: 51
## initial value 327.241724
## iter 10 value 230.238682
## iter 20 value 200.375168
## iter 30 value 194.761009
## iter 40 value 193.170369
## iter 50 value 191.990434
## iter 60 value 191.604307
## iter 70 value 191.573214
## iter 80 value 191.571182
## iter 80 value 191.571181
## iter 80 value 191.571181
## final value 191.571181
## converged
## # weights: 71
## initial value 354.632513
## iter 10 value 226.889711
## iter 20 value 201.037957
## iter 30 value 188.792621
## iter 40 value 183.553814
## iter 50 value 180.567797
## iter 60 value 179.362311
## iter 70 value 178.844955
## iter 80 value 178.418112
## iter 90 value 177.714354
## iter 100 value 177.490190
## final value 177.490190
## stopped after 100 iterations
## # weights: 91
## initial value 345.240667
## iter 10 value 226.327004
## iter 20 value 210.541253
## iter 30 value 193.846841
## iter 40 value 184.553099
## iter 50 value 179.373967
## iter 60 value 177.086500
## iter 70 value 173.580211
## iter 80 value 171.891026
## iter 90 value 170.921024
## iter 100 value 170.333870
## final value 170.333870
## stopped after 100 iterations
## # weights: 11
## initial value 353.656477
## iter 10 value 234.576528
## iter 20 value 230.057669
## iter 30 value 224.893530
## iter 40 value 221.363976
## iter 50 value 221.281668
## final value 221.281626
```

```
## converged
## # weights: 31
## initial value 369.458082
## iter 10 value 221.143999
## iter 20 value 207.591553
## iter 30 value 202.063622
## iter 40 value 198.579589
## iter 50 value 197.408671
## iter 60 value 197.057007
## iter 70 value 196.818982
## iter 80 value 196.645404
## iter 90 value 196.591921
## iter 100 value 196.590589
## final value 196.590589
## stopped after 100 iterations
## # weights: 51
## initial value 316.136597
## iter 10 value 207.488781
## iter 20 value 189.721840
## iter 30 value 179.370452
## iter 40 value 175.489114
## iter 50 value 174.464830
## iter 60 value 174.287934
## iter 70 value 174.008382
## iter 80 value 173.915473
## iter 90 value 173.906184
## iter 100 value 173.905140
## final value 173.905140
## stopped after 100 iterations
## # weights: 71
## initial value 453.428596
## iter 10 value 212.929532
## iter 20 value 177.267231
## iter 30 value 168.159301
## iter 40 value 158.631545
## iter 50 value 148.514875
## iter 60 value 146.894500
## iter 70 value 145.997394
## iter 80 value 145.345309
## iter 90 value 144.923725
## iter 100 value 143.967521
## final value 143.967521
## stopped after 100 iterations
## # weights: 91
## initial value 585.398680
## iter 10 value 204.444793
## iter 20 value 175.843865
## iter 30 value 160.893930
## iter 40 value 154.730876
## iter 50 value 149.818544
## iter 60 value 148.614896
## iter 70 value 147.674770
## iter 80 value 144.193789
## iter 90 value 139.241098
```



```
## iter 100 value 138.122587
## final value 138.122587
## stopped after 100 iterations
## # weights: 11
## initial value 316.791635
## iter 10 value 231.834373
## iter 20 value 223.873067
## iter 30 value 221.176644
## iter 40 value 220.888544
## final value 220.888519
## converged
## # weights: 31
## initial value 322.378505
## iter 10 value 211.863163
## iter 20 value 200.374817
## iter 30 value 199.958136
## iter 40 value 199.193852
## iter 50 value 197.032871
## iter 60 value 196.085375
## iter 70 value 195.843943
## iter 80 value 193.857534
## iter 90 value 192.473117
## iter 100 value 192.288072
## final value 192.288072
## stopped after 100 iterations
## # weights: 51
## initial value 366.015939
## iter 10 value 207.383157
## iter 20 value 182.017589
## iter 30 value 172.155790
## iter 40 value 170.179619
## iter 50 value 167.745111
## iter 60 value 166.552154
## iter 70 value 165.126074
## iter 80 value 163.060986
## iter 90 value 162.131240
## iter 100 value 162.118761
## final value 162.118761
## stopped after 100 iterations
## # weights: 71
## initial value 414.132766
## iter 10 value 213.793243
## iter 20 value 185.588753
## iter 30 value 176.301519
## iter 40 value 168.174449
## iter 50 value 159.772418
## iter 60 value 154.770808
## iter 70 value 152.616293
## iter 80 value 149.227231
## iter 90 value 148.342372
## iter 100 value 147.956165
## final value 147.956165
## stopped after 100 iterations
## # weights: 91
```

```
## initial value 311.231008
## iter 10 value 205.616053
## iter 20 value 169.144584
## iter 30 value 141.273017
## iter 40 value 118.783339
## iter 50 value 106.998705
## iter 60 value 101.313443
## iter 70 value 99.127744
## iter 80 value 98.252448
## iter 90 value 97.915223
## iter 100 value 97.340023
## final value 97.340023
## stopped after 100 iterations
## # weights: 11
## initial value 346.237464
## iter 10 value 251.168949
## iter 20 value 221.363758
## iter 30 value 220.864460
## final value 220.847344
## converged
## # weights: 31
## initial value 314.325735
## iter 10 value 222.592117
## iter 20 value 208.643738
## iter 30 value 199.127824
## iter 40 value 190.778731
## iter 50 value 185.295954
## iter 60 value 184.315721
## iter 70 value 184.098030
## iter 80 value 183.664786
## iter 90 value 183.391583
## iter 100 value 182.683658
## final value 182.683658
## stopped after 100 iterations
## # weights: 51
## initial value 483.770337
## iter 10 value 204.939156
## iter 20 value 191.125257
## iter 30 value 175.385070
## iter 40 value 169.404598
## iter 50 value 166.007039
## iter 60 value 163.743240
## iter 70 value 160.689235
## iter 80 value 158.590326
## iter 90 value 157.647876
## iter 100 value 157.512515
## final value 157.512515
## stopped after 100 iterations
## # weights: 71
## initial value 378.372862
## iter 10 value 218.743929
## iter 20 value 179.161298
## iter 30 value 161.587478
## iter 40 value 155.746612
```

```
## iter 50 value 148.003977
## iter 60 value 140.011590
## iter 70 value 138.880322
## iter 80 value 137.814388
## iter 90 value 137.175673
## iter 100 value 136.387416
## final value 136.387416
## stopped after 100 iterations
## # weights: 91
## initial value 296.221297
## iter 10 value 198.117032
## iter 20 value 166.553269
## iter 30 value 139.854514
## iter 40 value 119.347582
## iter 50 value 104.881381
## iter 60 value 98.428978
## iter 70 value 94.880571
## iter 80 value 93.738263
## iter 90 value 93.328897
## iter 100 value 93.162993
## final value 93.162993
## stopped after 100 iterations
## # weights: 11
## initial value 356.653730
## iter 10 value 258.233225
## iter 20 value 246.830427
## iter 30 value 243.047522
## iter 40 value 242.650265
## final value 242.650224
## converged
```

```
n.tatol.time = proc.time() - n.start.time
n.tatol.time[3]
```

```
## elapsed
## 84.17
```

```
nnetFit
```

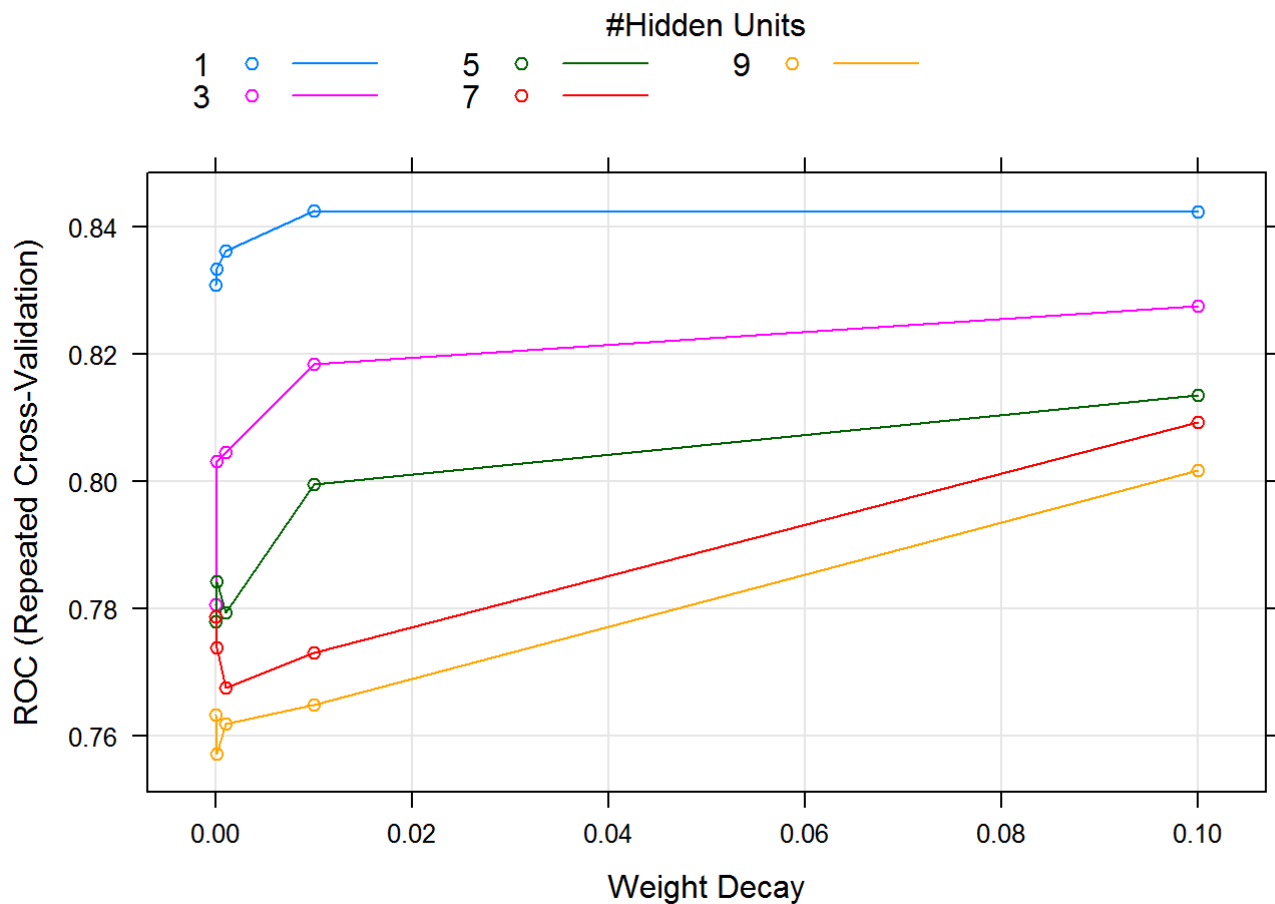
```

## Neural Network
##
## 538 samples
## 8 predictor
## 2 classes: 'N', 'Y'
##
## Pre-processing: centered (8), scaled (8)
## Resampling: Cross-Validated (10 fold, repeated 5 times)
## Summary of sample sizes: 484, 484, 484, 484, 484, 484, ...
## Resampling results across tuning parameters:
##
## size decay ROC Sens Spec ROC SD Sens SD
## 1 0e+00 0.8308129 0.8165714 0.6472515 0.05798757 0.08698571
## 1 1e-04 0.8333258 0.8194286 0.6470175 0.05714836 0.08472510
## 1 1e-03 0.8361688 0.8320000 0.6346199 0.04877146 0.07495994
## 1 1e-02 0.8424712 0.8451429 0.6196491 0.05041169 0.05229908
## 1 1e-01 0.8423826 0.8434286 0.6175439 0.05096933 0.05391464
## 3 0e+00 0.7805530 0.8000000 0.6121053 0.09411257 0.09090228
## 3 1e-04 0.8031671 0.8285714 0.5823392 0.06281368 0.07526159
## 3 1e-03 0.8046074 0.8051429 0.6128070 0.06989823 0.08633208
## 3 1e-02 0.8184227 0.8137143 0.6240936 0.05380421 0.06712766
## 3 1e-01 0.8275789 0.8285714 0.6323977 0.04692167 0.06323238
## 5 0e+00 0.7778413 0.7857143 0.6093567 0.06659153 0.07813955
## 5 1e-04 0.7841738 0.8028571 0.6025731 0.05837126 0.07597759
## 5 1e-03 0.7793642 0.7994286 0.5896491 0.05973696 0.07945881
## 5 1e-02 0.7995372 0.8097143 0.6180117 0.05866029 0.06647174
## 5 1e-01 0.8135589 0.8148571 0.6057310 0.04789353 0.05750324
## 7 0e+00 0.7787761 0.8142857 0.5821637 0.05283325 0.06196827
## 7 1e-04 0.7737644 0.7885714 0.5983626 0.04983286 0.06190102
## 7 1e-03 0.7675948 0.7891429 0.6034503 0.07443360 0.06372839
## 7 1e-02 0.7730359 0.7891429 0.5761988 0.06751535 0.07389672
## 7 1e-01 0.8092531 0.8125714 0.6066667 0.04897674 0.06247965
## 9 0e+00 0.7632247 0.7805714 0.5829240 0.06442872 0.06961308
## 9 1e-04 0.7570894 0.7800000 0.6011696 0.05635148 0.06884542
## 9 1e-03 0.7618346 0.7811429 0.5900585 0.06814220 0.08155302
## 9 1e-02 0.7648939 0.7851429 0.5834503 0.05805882 0.05807978
## 9 1e-01 0.8016859 0.8034286 0.5928655 0.05974861 0.07270349
## Spec SD
## 0.12368584
## 0.12313342
## 0.12003643
## 0.09858835
## 0.09887845
## 0.13630774
## 0.12268386
## 0.12199032
## 0.13456668
## 0.10235033
## 0.11006981
## 0.12383962
## 0.12290020
## 0.10154202
## 0.10032433

```

```
## 0.11212758
## 0.10823915
## 0.11847226
## 0.12556006
## 0.10993060
## 0.11453473
## 0.09870360
## 0.12209885
## 0.11395199
## 0.11439266
##
## ROC was used to select the optimal model using the largest value.
## The final values used for the model were size = 1 and decay = 0.01.
```

```
plot(nnetFit)
```



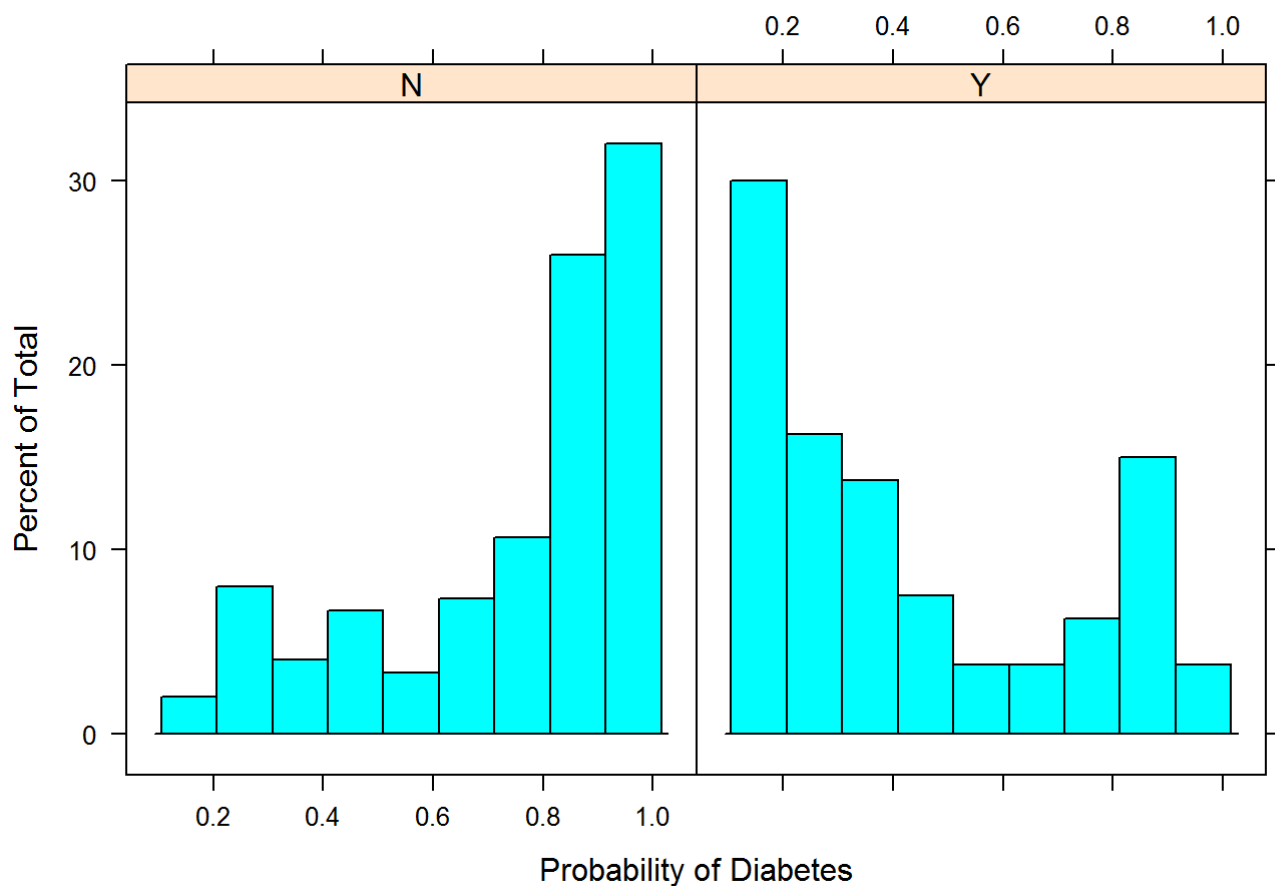
```
nnetClass=predict(nnetFit, newdata=testing)
nnetClass
```

```
## [1] N Y N N Y Y N N N N N Y N N Y N Y Y Y N N Y N N N N N N N Y N N N Y
## [36] N Y N Y N Y N N Y Y N N N N Y Y N N N Y N Y N N N N Y N Y N Y N N Y Y
## [71] Y Y N Y Y Y N N Y Y N N N Y Y N N N N N Y Y Y N Y N Y N Y N N Y N N N
## [106] N N Y Y Y N N N Y Y Y N Y N N Y Y N Y N N N N Y N N N N N Y N N N Y Y
## [141] N Y Y N Y N N N N N Y N N Y N N N Y N N N N N Y Y Y N N N N N Y N Y
## [176] N N N N N N Y N N N N Y N N N N N N N N Y Y N N N Y N Y Y N N Y Y N
## [211] N N N Y N N Y N Y N N N N Y N Y N N N N
## Levels: N Y
```

```
nnetProbs <- predict(nnetFit, newdata = testing, type = "prob")
head(nnetProbs)
```

```
##           N           Y
## 2 0.9671650 0.03283495
## 3 0.1876943 0.81230570
## 4 0.9676413 0.03235873
## 6 0.8848205 0.11517945
## 8 0.2615700 0.73842997
## 9 0.2332571 0.76674293
```

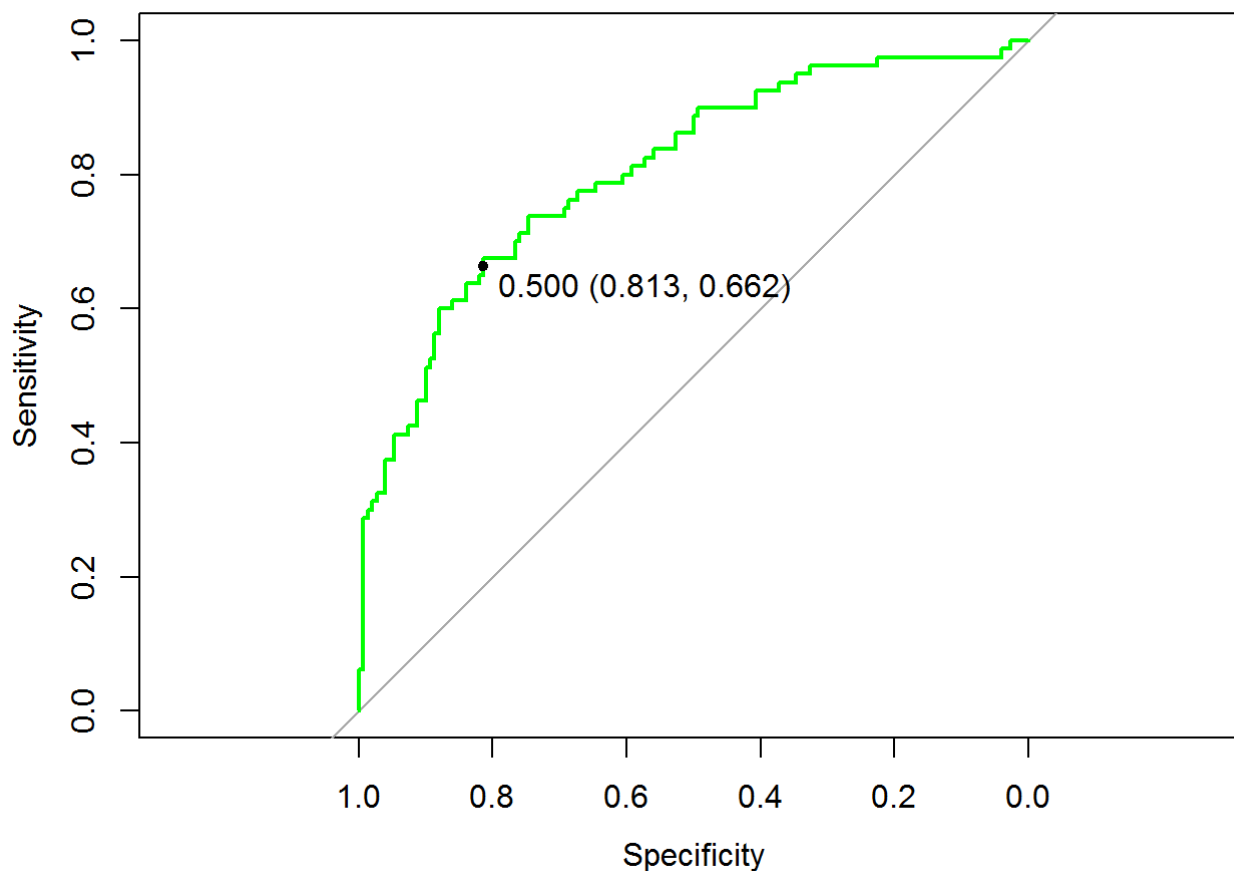
```
histogram(~nnetProbs$N|testing$Class, xlab = "Probability of Diabetes")
```



```
n.c = confusionMatrix(data = nnetClass, testing$Class)
n.Accuracy = n.c$overall[1]
s.kappa = n.c$overall[2]
#plot ROC
nnetROC <- roc(testing$Class, nnetProbs[, 1], levels(testing$Class))
nnetROC$auc
```

```
## Area under the curve: 0.8058
```

```
plot(nnetROC, type = "S", print.thres = .5, col='green')
```



```
##
## Call:
## roc.default(response = testing$Class, predictor = nnetProbs[, 1], controls = levels(testing$Class))
##
## Data: nnetProbs[, 1] in 150 controls (testing$Class N) > 80 cases (testing$Class Y).
## Area under the curve: 0.8058
```

Compare models

```
#Check time spent on each model
```

```
cbind(RF.1 = rf.total.time.1[3], RF.2= rf.total.time.2[3], Boost = boost.total.time[3], SVM= v.
tatol.time[3], NeuralNet = n.tatol.time[3])
```

```
##           RF.1  RF.2 Boost   SVM NeuralNet
## elapsed 44.04 69.92 25.33 23.25      84.17
```

```
#Compare
```

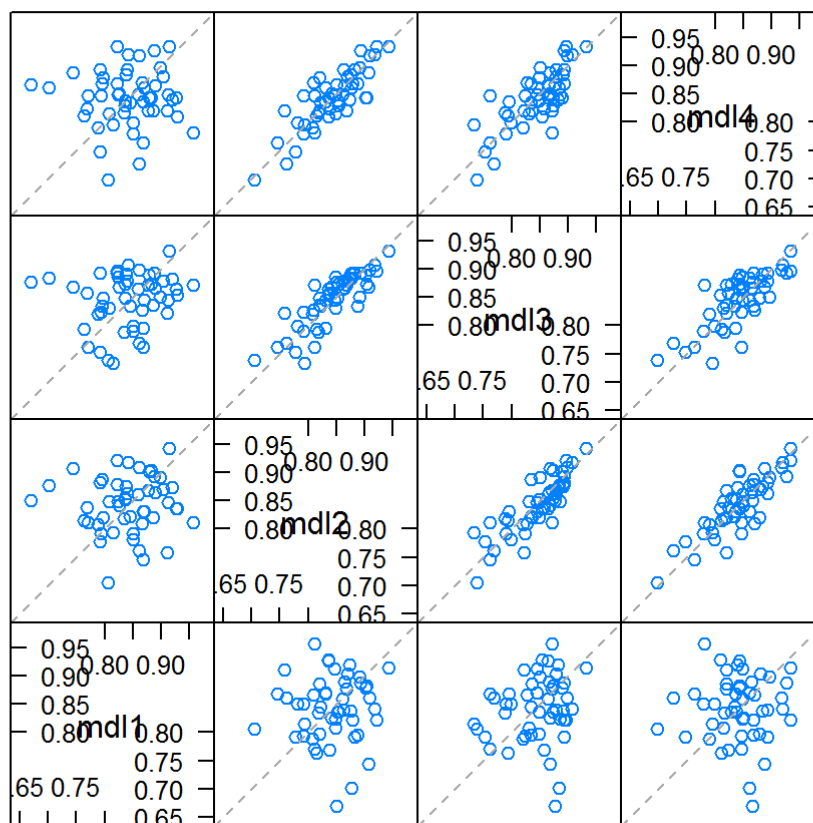
```
res = resamples(list(md11 = rffit2, md12 = gbmFit, md13= svmFit, md14 = nnetFit))
summary(res)
```

```
##
## Call:
## summary.resamples(object = res)
##
## Models: md11, md12, md13, md14
## Number of resamples: 50
##
## ROC
##      Min. 1st Qu. Median   Mean 3rd Qu.   Max. NA's
## md11 0.6692  0.8064 0.8440 0.8421  0.8814 0.9571    0
## md12 0.7038  0.8117 0.8474 0.8429  0.8763 0.9429    0
## md13 0.7338  0.8227 0.8556 0.8455  0.8797 0.9323    0
## md14 0.6977  0.8173 0.8451 0.8425  0.8703 0.9349    0
##
## Sens
##      Min. 1st Qu. Median   Mean 3rd Qu.   Max. NA's
## md11 0.6571  0.8000 0.8571 0.8446  0.8857 0.9714    0
## md12 0.7143  0.8357 0.8857 0.8731  0.9143 0.9714    0
## md13 0.7429  0.8286 0.8714 0.8686  0.9143 0.9714    0
## md14 0.7429  0.8000 0.8286 0.8451  0.8857 0.9714    0
##
## Spec
##      Min. 1st Qu. Median   Mean 3rd Qu.   Max. NA's
## md11 0.3684  0.5263 0.6316 0.6120  0.6842 0.8421    0
## md12 0.2632  0.4868 0.5789 0.5774  0.6316 0.8333    0
## md13 0.3684  0.5263 0.5950 0.5994  0.6667 0.7895    0
## md14 0.3684  0.5789 0.6111 0.6196  0.6842 0.8947    0
```

```
# Visualizing Resamples
```

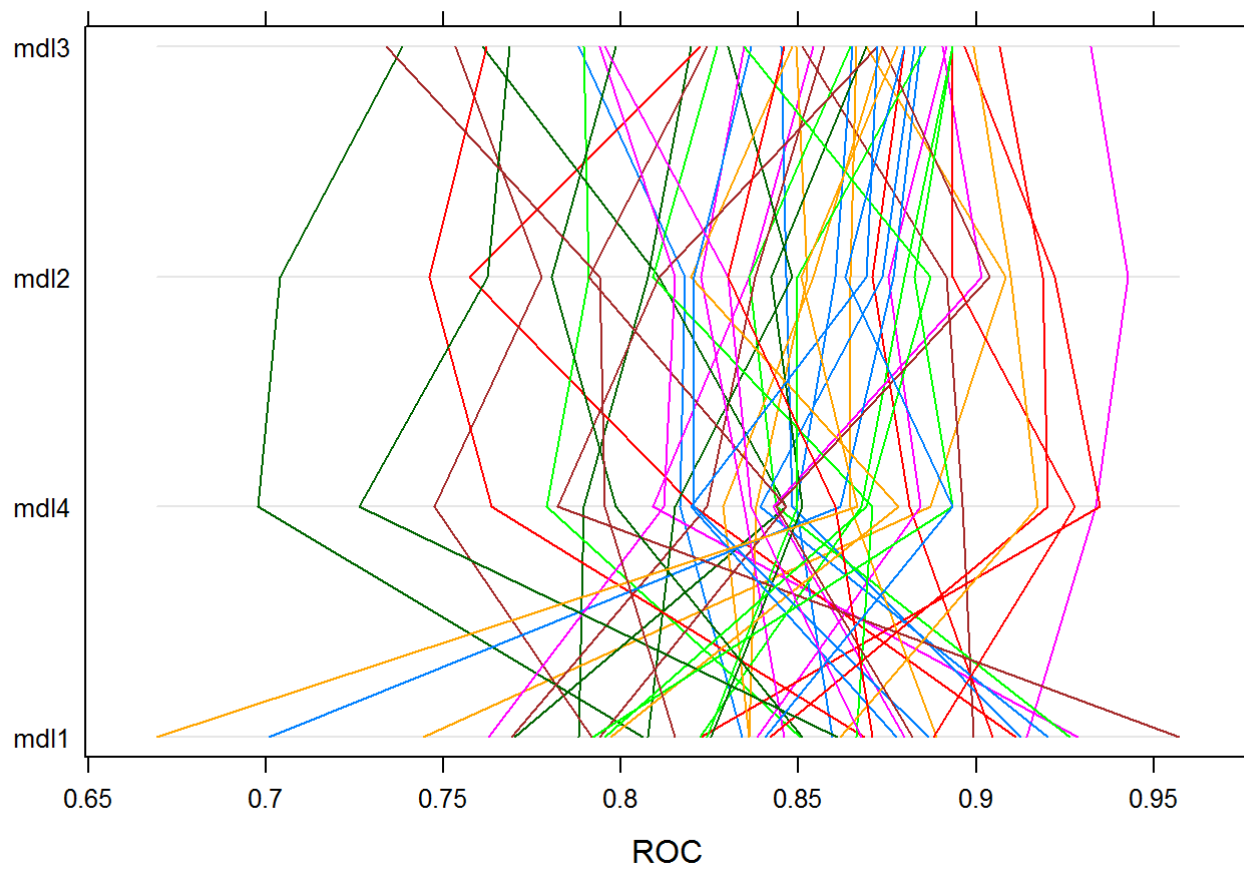
```
splo(m(res, metric = "ROC") #scatter plot
```


ROC

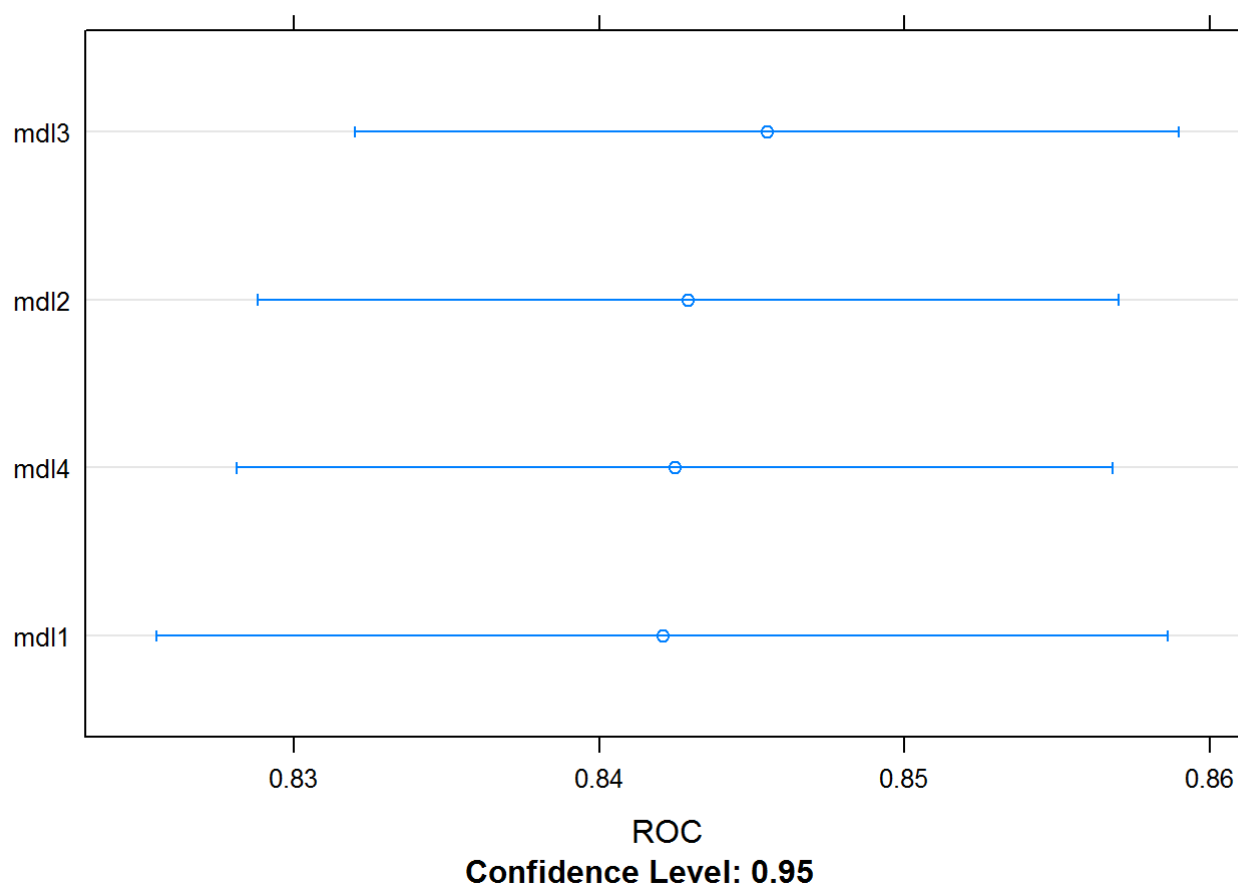


Scatter Plot Matrix

```
parallelplot(res, metric = "ROC")
```



```
dotplot(res, metric = "ROC")
```

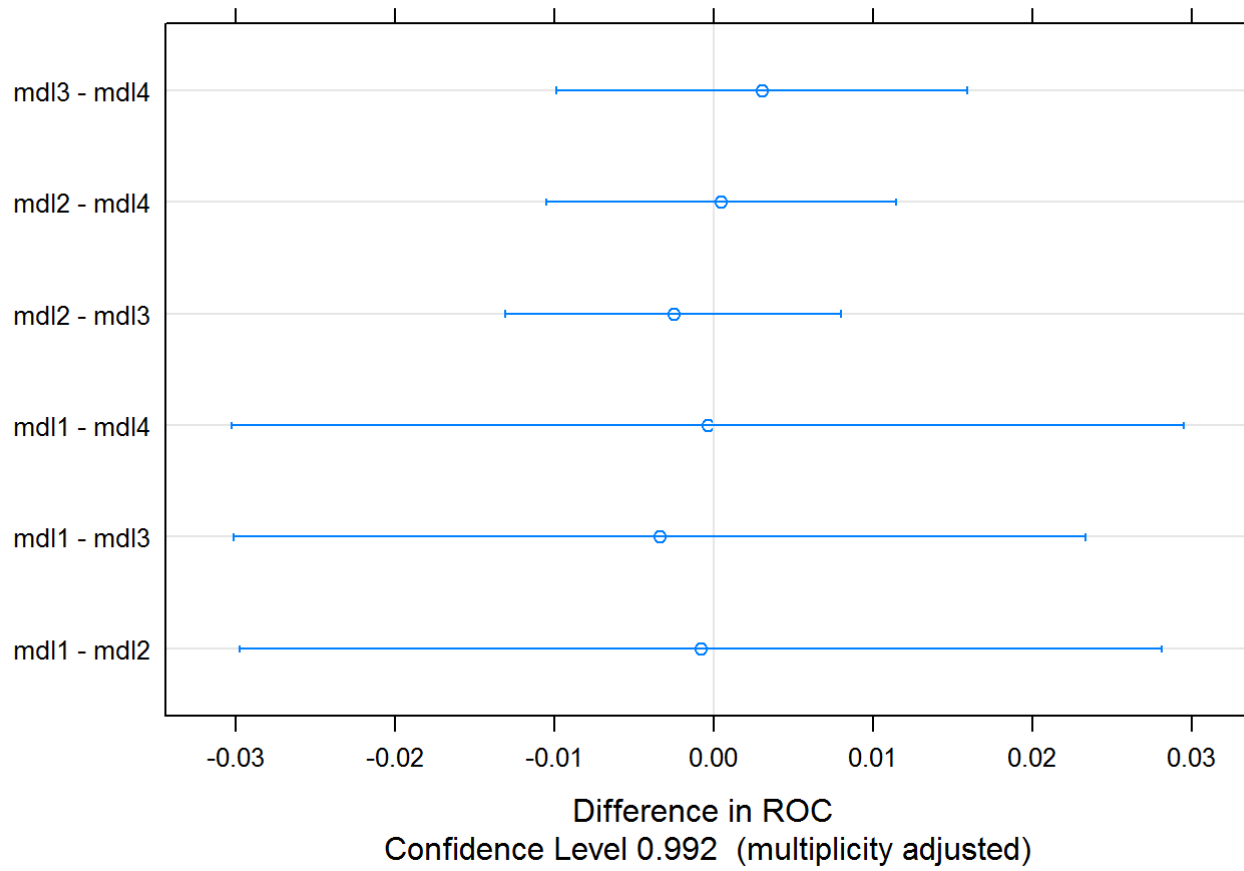


Test to see if there are differences between the models

```
rocDiffs <- diff(res, metric = "ROC") # mdl2 and mdl3 have least difference
summary(rocDiffs)
```

```
##
## Call:
## summary.diff.resamples(object = rocDiffs)
##
## p-value adjustment: bonferroni
## Upper diagonal: estimates of the difference
## Lower diagonal: p-value for H0: difference = 0
##
## ROC
##      mdl1 mdl2      mdl3      mdl4
## mdl1      -0.0008480 -0.0034177 -0.0004018
## mdl2 1          -0.0025698  0.0004461
## mdl3 1      1          0.0030159
## mdl4 1      1          1
```

```
#Visualizing the Differences
dotplot(rocDiffs, metric = "ROC")
```



Based on this analysis, the difference between the models is SVM performs better