week 7 notes

Brady Miller

Table of contents

Tuesday, Feb 21

> **!** TIL
>
> Include a *very brief* summary of what you learnt in this class here.
> Today, I learnt the following concepts in class:
>
> 1. General regularization/shrinkage estimators
> 2. LASSO regression estimator
> 3. Gradient descent

```
# importing necessary libraries and the data set utilized in class
library(ISLR2)
library(dplyr)
```

```
Attaching package: 'dplyr'

The following objects are masked from 'package:stats':

    filter, lag

The following objects are masked from 'package:base':

    intersect, setdiff, setequal, union
```

```
library(tidyr)
library(purrr)
library(readr)
library(glmnet)
```

```
Loading required package: Matrix

Attaching package: 'Matrix'

The following objects are masked from 'package:tidyr':

    expand, pack, unpack

Loaded glmnet 4.1-6
```

```
library(caret)
```

```
Loading required package: ggplot2

Loading required package: lattice

Attaching package: 'caret'

The following object is masked from 'package:purrr':

    lift
```

```
library(car)
```

```
Loading required package: carData
```

```
Attaching package: 'car'
```

```
The following object is masked from 'package:purrr':

    some
```

```
The following object is masked from 'package:dplyr':

    recode
```

```
library(torch)

df <- Boston
attach(Boston)
```

February 21st

Regularization/Shrinkage estimators

Objective function defined below:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + ... + \beta_p x_p + \epsilon$$

The least-squares objective selects the model with the smallest residual standard error

$$L(\beta_0, \beta_2, ..., \beta_p) = SS_{Res} = \sum_{i=1}^{n} (y_i - \beta_0 - \beta_1 x_{1,i} - \cdots - \beta_p x_{p,i})^2$$

The solution to this problem is denoted as follows...

$$(b_1, b_2, ..., b_p) = \underset{\beta_1 \cdots \beta_p}{\arg\min}\, L(\beta_0, \beta_1, ..., \beta_p)$$

* Don't always want every variable from a data set in our final model

- To select only a subset of these variables in our final model, we can include a penalty term (include penalty term that doesn't have the intercept)
- Below is the penalty term

$$p_\lambda(\beta_1, \dots, \beta_p)$$

* This penalty term favors solutions which select smaller subset of the variables (sparser solutions),as some variables may not be 'important' to the final model.

- When we include the penalty term, the objective function becomes…

$$L(\beta_0, \beta_1, \dots, \beta_p) = L(\beta_0, \beta_2, \dots, \beta_p) + p_\lambda(\beta_1, \dots, \beta_p)$$

In class we mentioned some of the most common penalty functions which are:

1. Ridge Regression estimator
$$p_\lambda = \beta_1^2 + \beta_2^2 + \cdots + \beta_p^2$$
2. LASSO regression estimator
$$p_\lambda = |\beta_1| + |\beta_2| + \cdots + |\beta_p|$$
3. General case in glmnet()
$$p_\lambda = |\beta_1|^\alpha + |\beta_2|^\alpha + \cdots + |\beta_p|^\alpha$$

In the case of each penalty term, we can see that we want to find a solution which:

- Minimizes SS_{Res}, and
- Minimizes p_λ, which means that we want to find a solution which favors sparser solutions

How the penalty term impacts the objective function:

- After implementing the penalty function if any of the β_p turns out to be 0, it means that it doesn't have an impact on the model as you are multiplying the variable by 0 so it won't be included (for a change in that x_p, there is no change in the model) –> the variables associated with the zeroes are then dropped from the final model
- The variables that are co-linear are shrunk to 0, therefore eliminating those variables from the final model (deems that variable not important)

LASSO

Unlike lm(), the glmnet() function doesn't take in a formula

To use LASSO we can first rescale the variables so they are all on same scale

```
full_model<- lm(medv ~., df)
X <- model.matrix(full_model)[,-1]
head(X)
```

```
     crim zn indus chas   nox    rm  age    dis rad tax ptratio lstat
1 0.00632 18  2.31    0 0.538 6.575 65.2 4.0900   1 296    15.3  4.98
2 0.02731  0  7.07    0 0.469 6.421 78.9 4.9671   2 242    17.8  9.14
3 0.02729  0  7.07    0 0.469 7.185 61.1 4.9671   2 242    17.8  4.03
4 0.03237  0  2.18    0 0.458 6.998 45.8 6.0622   3 222    18.7  2.94
5 0.06905  0  2.18    0 0.458 7.147 54.2 6.0622   3 222    18.7  5.33
6 0.02985  0  2.18    0 0.458 6.430 58.7 6.0622   3 222    18.7  5.21
```

```
all_cols <- 1:ncol(X)
drop_scale <- c(4)
include_scale <- all_cols[-drop_scale]

for (i in include_scale) { X[,i] <- scale(X[,i]) }
head(X)
```

```
        crim         zn      indus chas        nox        rm         age
1 -0.4193669  0.2845483 -1.2866362    0 -0.1440749 0.4132629 -0.1198948
2 -0.4169267 -0.4872402 -0.5927944    0 -0.7395304 0.1940824  0.3668034
3 -0.4169290 -0.4872402 -0.5927944    0 -0.7395304 1.2814456 -0.2655490
4 -0.4163384 -0.4872402 -1.3055857    0 -0.8344581 1.0152978 -0.8090878
5 -0.4120741 -0.4872402 -1.3055857    0 -0.8344581 1.2273620 -0.5106743
6 -0.4166314 -0.4872402 -1.3055857    0 -0.8344581 0.2068916 -0.3508100
       dis        rad        tax    ptratio      lstat
1 0.140075 -0.9818712 -0.6659492 -1.4575580 -1.0744990
2 0.556609 -0.8670245 -0.9863534 -0.3027945 -0.4919525
3 0.556609 -0.8670245 -0.9863534 -0.3027945 -1.2075324
4 1.076671 -0.7521778 -1.1050216  0.1129203 -1.3601708
5 1.076671 -0.7521778 -1.1050216  0.1129203 -1.0254866
6 1.076671 -0.7521778 -1.1050216  0.1129203 -1.0422909
```

All values are now in same scale (between -3 and 3)

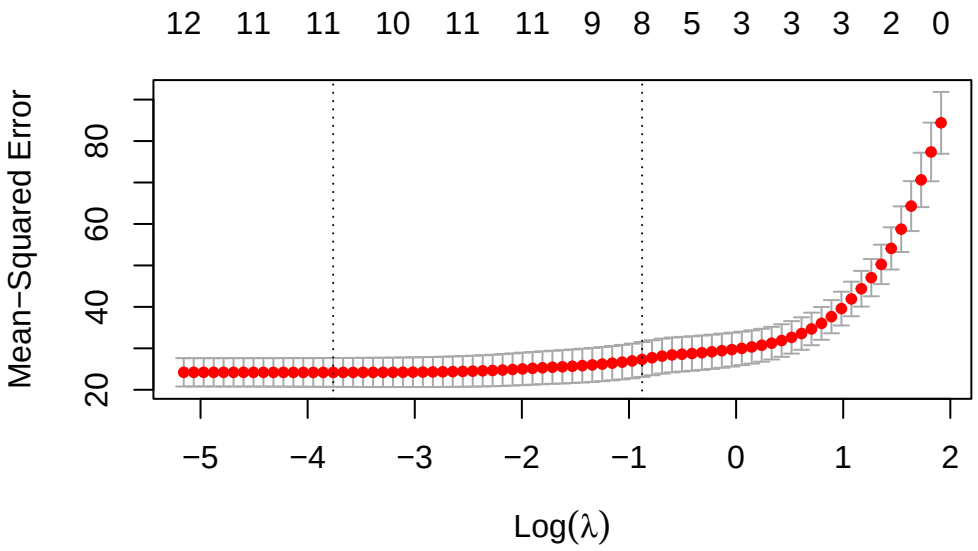
```
y <- df$medv
```

```
lasso <- cv.glmnet(X,y,alpha = 1)
# alpha is exponent for function
```

```
lasso
```

```
Call:  cv.glmnet(x = X, y = y, alpha = 1)

Measure: Mean-Squared Error

    Lambda Index Measure    SE Nonzero
min 0.0233    62   24.19 3.477      10
1se 0.4159    31   27.32 4.207       8
```

```
plot(lasso)
```



Plot explanation:

- For every lambda in range, computes the estimator
- plots mean squared error (sum of squared residual)
- The penalty we include depends on value of lambda –> different lambda value leads to different subset of variables selected

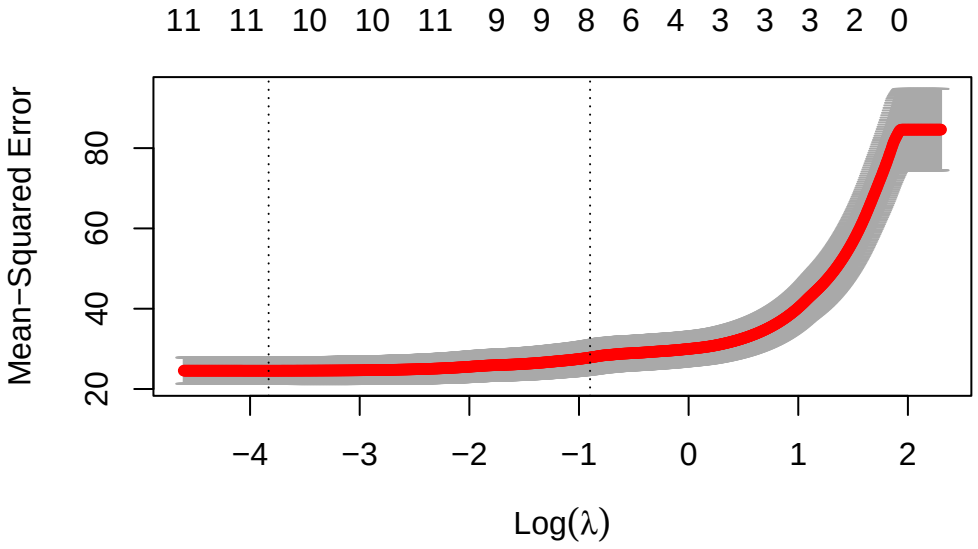
- As lambda increases, the effect that the penalty has on the solution is stronger (the value of p sub lambda also increases)
- If minimizing p_λ, want to drop more variables and sparser solutions
- As we go from right to left (lambda increases) the number of variables that are selected decreases (number of variables selected is along the top)
- Is a balancing act
- Near 0 penalty = select all variables & has lower mean squared error
- Introducing large penalty –> sparse solutions & has higher mean squared error

How to known what lambda value is appropriate…

- select the λ value right before where it spikes upwards (choose elbow point), as this is most stable solution
    1. R has algorithm presented in next code cell that chooses the elbow point that minimizes mean squared error

In the code below, we specifying sequence of values of lambda to search

```
lambdas <- 10 ^ seq(-2,1,length.out = 1000)
lasso <- cv.glmnet(X,y,alpha = 1,lambda = lambdas)
plot(lasso)
```



```r
lasso_coef <- coef(lasso, s = "lambda.min")
# can do lambda.1se to choose different lambda that will result in different
# amount of variables chosen
selected_vars <- rownames(lasso_coef)[which(abs(lasso_coef) > 0)][-1]
# excludes the intercept term
lasso_coef
```

```
13 x 1 sparse Matrix of class "dgCMatrix"
                     s1
(Intercept) 22.33621229
crim        -0.97836981
zn           0.99821306
indus        .
chas         2.84218803
nox         -2.01913651
rm           2.61802954
age          0.00291066
dis         -3.03203929
rad          2.16037661
tax         -1.81521262
ptratio     -1.98870632
lstat       -3.89871882
```

```r
selected_vars
```

```
 [1] "crim"    "zn"      "chas"    "nox"     "rm"      "age"     "dis"
 [8] "rad"     "tax"     "ptratio" "lstat"
```

- sparse matrix
- these values are being calculated using gradient descent
- the values that have a dot are '0'

1. the final model is saying that we should have a model that drops age and indus (these were the 2 variables that stepwise regression told us to drop)

```r
full_model <- lm(medv ~ ., data=df)
lasso_model <- lm(y ~ X[, selected_vars])
```

```r
summary(lasso_model)
```

```
Call:
lm(formula = y ~ X[, selected_vars])

Residuals:
     Min       1Q   Median       3Q      Max
-15.1267  -2.7487  -0.5902   1.9056  26.2609

Coefficients:
                           Estimate Std. Error t value Pr(>|t|)
(Intercept)                 22.3350     0.2213 100.914  < 2e-16 ***
X[, selected_vars]crim      -1.0462     0.2834  -3.691 0.000248 ***
X[, selected_vars]zn         1.0878     0.3215   3.383 0.000773 ***
X[, selected_vars]chas       2.8591     0.8647   3.307 0.001013 **
X[, selected_vars]nox       -2.1478     0.4296  -4.999 8.01e-07 ***
X[, selected_vars]rm         2.5646     0.2938   8.728  < 2e-16 ***
X[, selected_vars]age        0.1016     0.3748   0.271 0.786563
X[, selected_vars]dis       -3.1585     0.4146  -7.617 1.33e-13 ***
X[, selected_vars]rad        2.4850     0.5593   4.443 1.09e-05 ***
X[, selected_vars]tax       -2.0764     0.5749  -3.611 0.000336 ***
X[, selected_vars]ptratio   -2.0217     0.2836  -7.130 3.59e-12 ***
X[, selected_vars]lstat     -3.9355     0.3602 -10.927  < 2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 4.793 on 494 degrees of freedom
Multiple R-squared:  0.7343,    Adjusted R-squared:  0.7284
F-statistic: 124.1 on 11 and 494 DF,  p-value: < 2.2e-16
```

LASSO summary

- Lasso is useful because it is one step
- In the lasso model, in order to select an appropriate model, need to create model, looking at mean square error and choosing lambda value that is appropriate
- Variable selection has finite (set) amount of steps
- lasso is more efficient for data sets with TONS of variables

Gradient descent

- Used for solving one of the penalized estimators problems
- General recipe for fitting models
- Derivative is telling us slope (for small change in x, what is change in y)

- If you end up with a minimum point, the derivative will be flat (slope = 0, no change in y for change in x)
- A minimizer is characterized by 2 points
    1. derivative has slope of 0
    2. the 2nd derivative has to be positive
- To do gradient descent, compute derivative with respect to every parameter (partial derivative)

Recall that the solution to a regression problem is given by

$$(b_1, b_2, \dots, b_p) = \underset{\beta_1 \dots \beta_p}{\arg\min}\, L(\beta_0, \beta_1, \dots, \beta_p)$$

where $L(\beta_0, \beta_2, \dots, \beta_p)$ is referred to as the loss function. If we want to find the values of $(\beta_0, \beta_2, \dots, \beta_p)$ which minimize $L()$, then using the general principle from calculus, we are interested in looking for values such that the partial derivative with respect to each β is 0.

In the case of linear regression, the derivatives can be computed by hand, and there exists a closed form solution to the above system of equations

However, in many other models, we don't have a method for obtaining closed form solutions. In such cases, the general strategy is as follows:

1. Compute gradient
2. Choose a step size η between (0,1)
    - Start off at some randomized initialized value and at every step, choose a step size between 0 and 1
3. Perform gradient descent
    - Take one step in direction of negative gradient(direction that leads to decrease in the objective function, L)
- Repeat those steps until you reach some sort of stable minimum (when change of L is not significant to continue)

This is how lasso problem is being solved

```
attach(cars)
```

Creating a loss function that calculates mean squared error

```r
Loss <- function(b,x,y) {
  squares <- (y - b[1] - b[2]*x)^2
  return(sum(squares))
}
b <- rnorm(2)
Loss(b, cars$speed, cars$dist)
```

```
[1] 84799.88
```

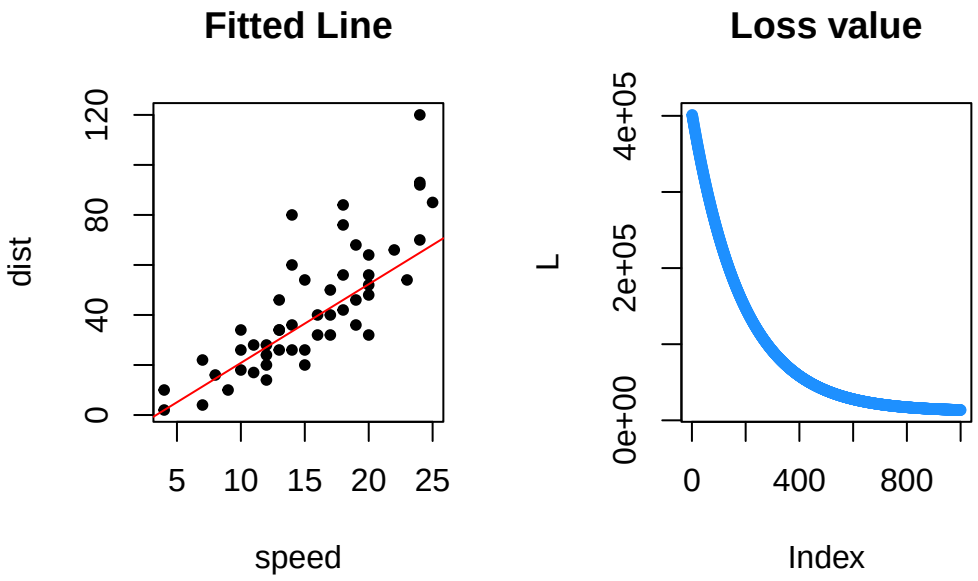
```r
# define a function to compute the gradients
grad <- function(b, Loss, x,y, eps=1e-5){
  b0_up <- Loss(c(b[1]+eps, b[2]),x,y)
  b0_dn <- Loss(c(b[1]-eps, b[2]),x,y)

  b1_up <- Loss(c(b[1], b[2]+eps),x,y)
  b1_dn <- Loss(c(b[1], b[2]-eps),x,y)

  grad_b0_L <- (b0_up - b0_dn) / (2 * eps)
  grad_b1_L <- (b1_up - b1_dn) / (2 * eps)

  return(c(grad_b0_L, grad_b1_L))
}

grad(b,Loss, cars$speed, cars$dist)
```

```
[1]  -3428.615 -61766.608
```

```r
steps <- 1000
L <- rep(Inf, steps)
eta <- 1e-7
b <- 10 * rnorm(2)

for (i in 1:steps){
  b <- b - eta * grad(b, Loss, cars$speed, cars$dist)
  L[i] <- Loss(b, cars$speed, cars$dist)
}
```

Creates a plot that shows the loss value for each index compared to the fitted line for the variables we plotted

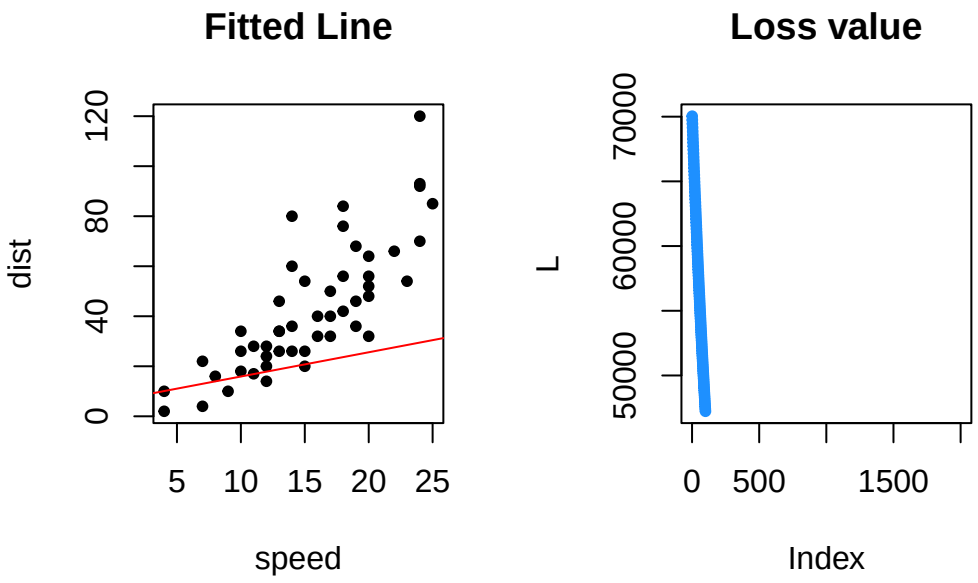
```r
options(repr.plot.width=12, repr.plot.height=7)
par(mfrow=c(1,2))
# Plot the final result
plot(dist ~ speed, cars, pch=20, main = "Fitted Line")
abline(b, col = 'red')

# Plot the change in loss function value
plot(L, type ='b', pch=20, col='dodgerblue', main='Loss value')
```

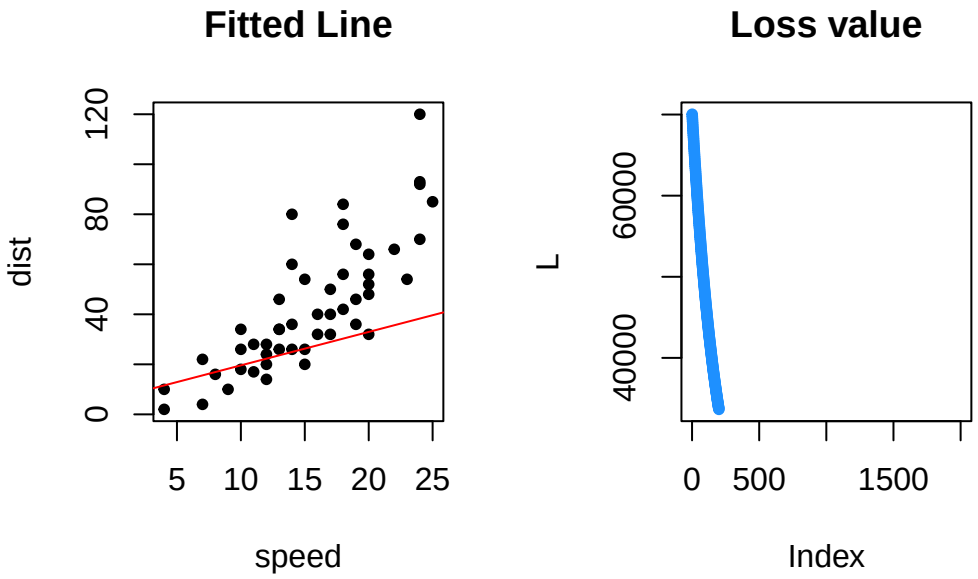


This next code chunk breaks down the loss function into various parts so you can see how the loss function progress at given indexes, along with the associated fitted line for the distance and speed plot

```r
options(repr.plot.width=12, repr.plot.height=7)
steps <- 2000
L <- rep(Inf, steps)
eta <- 1e-7
b <- 10 * rnorm(2)

for (i in 1:steps){
  b <- b - eta * grad(b, Loss, cars$speed, cars$dist)
```

```r
  L[i] <- Loss(b, cars$speed, cars$dist)

  if (i %% 100 == 0){
    par(mfrow=c(1,2))
    # Plot the final result
    plot(dist ~ speed, cars, pch=20, main = "Fitted Line")
    abline(b, col = 'red')

    # Plot the change in loss function value
    plot(L, type ='b', pch=20, col='dodgerblue', main='Loss value')
  }
}
```

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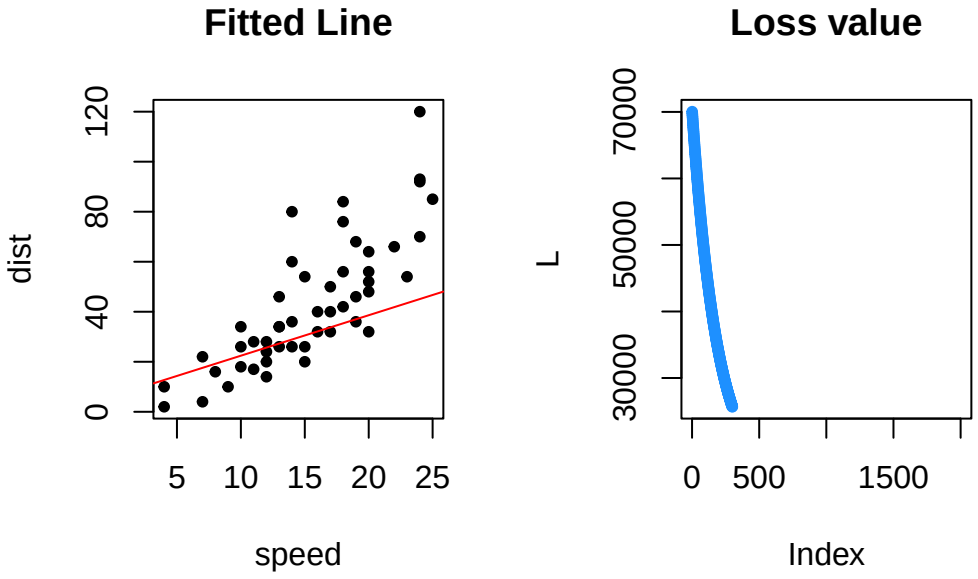
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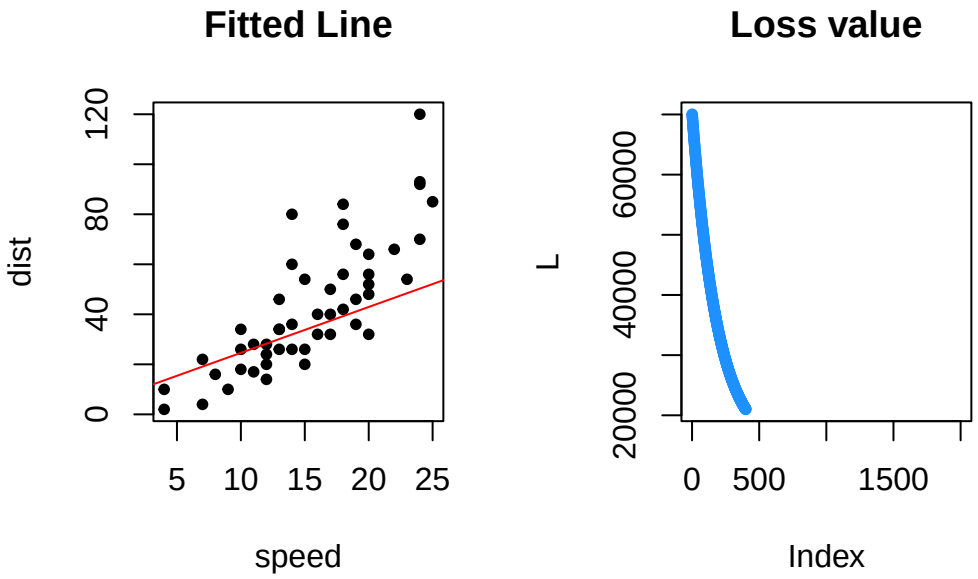
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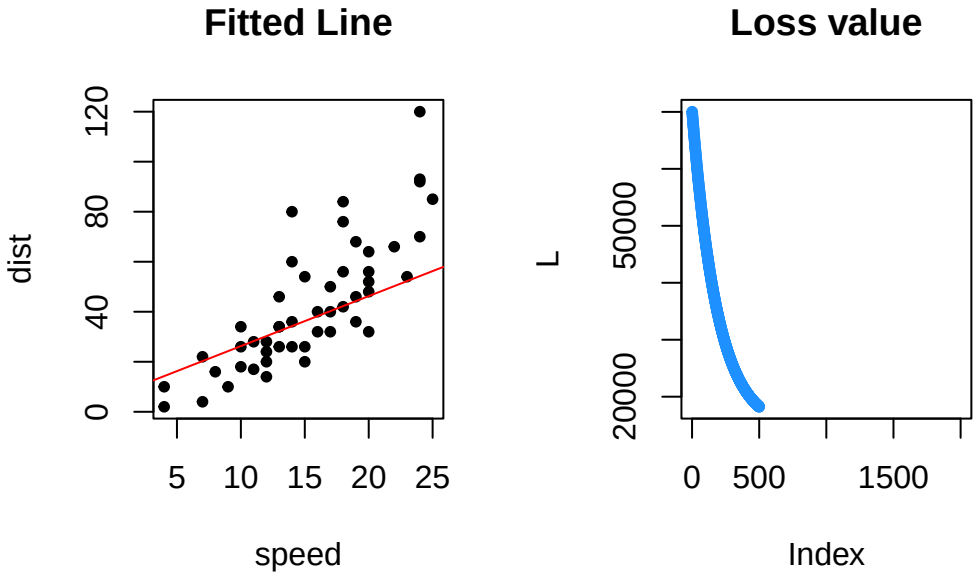
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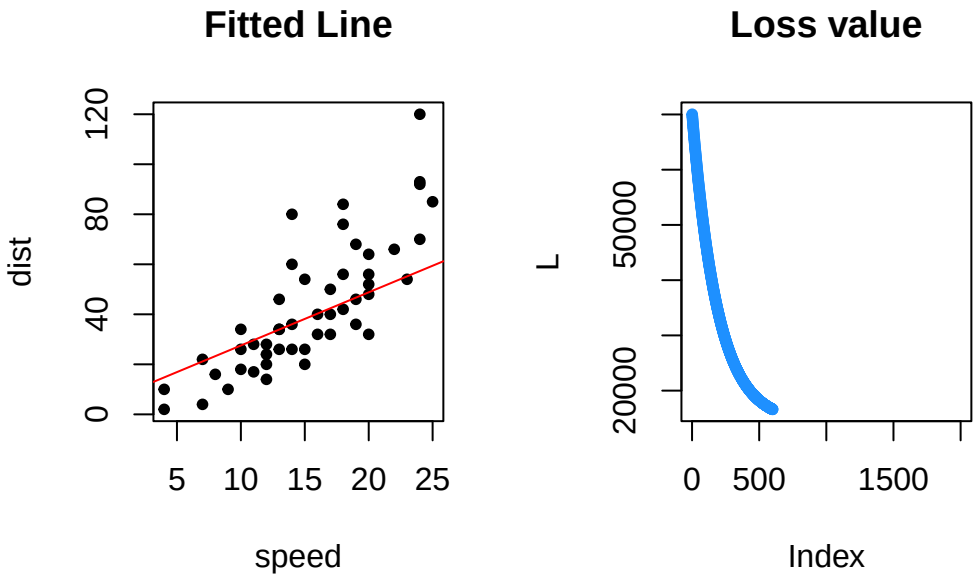
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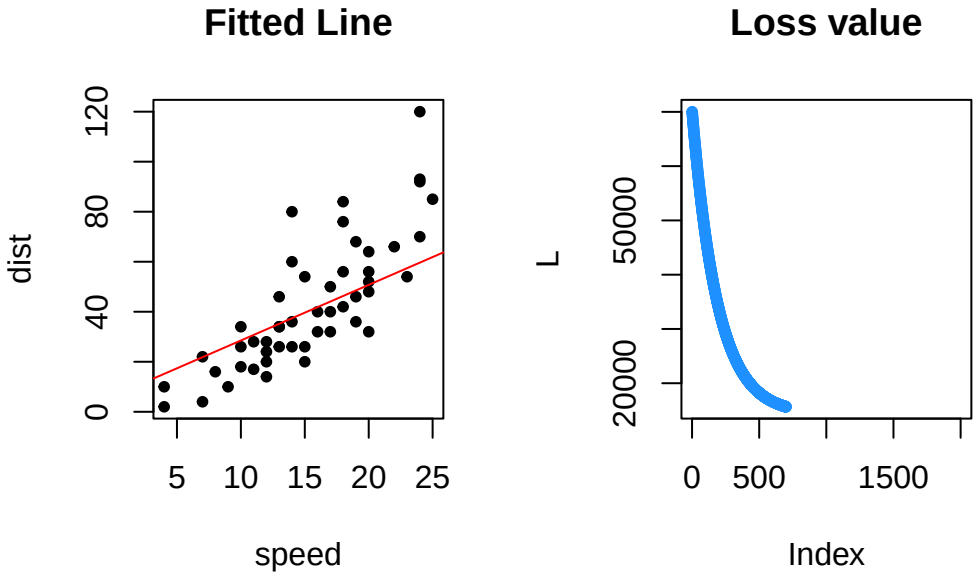
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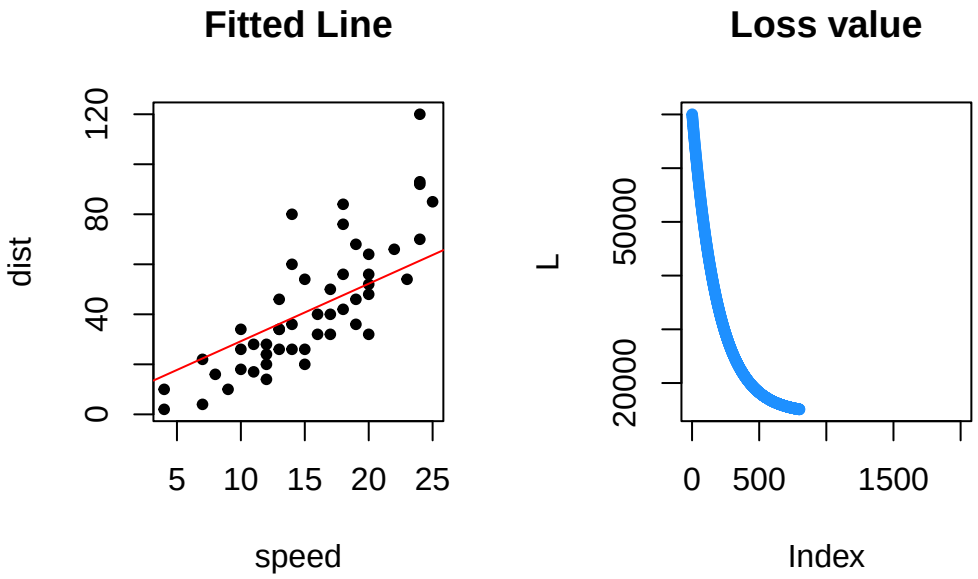
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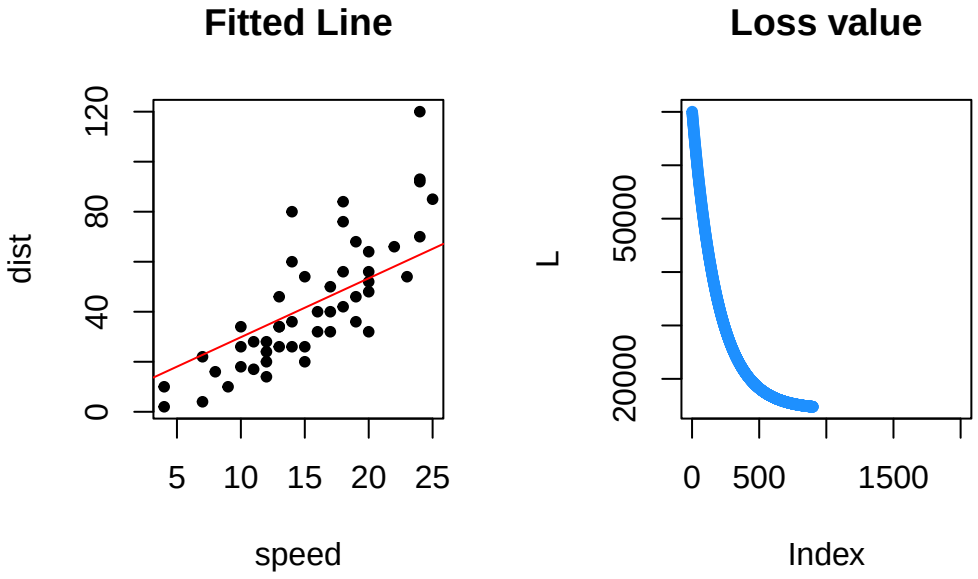
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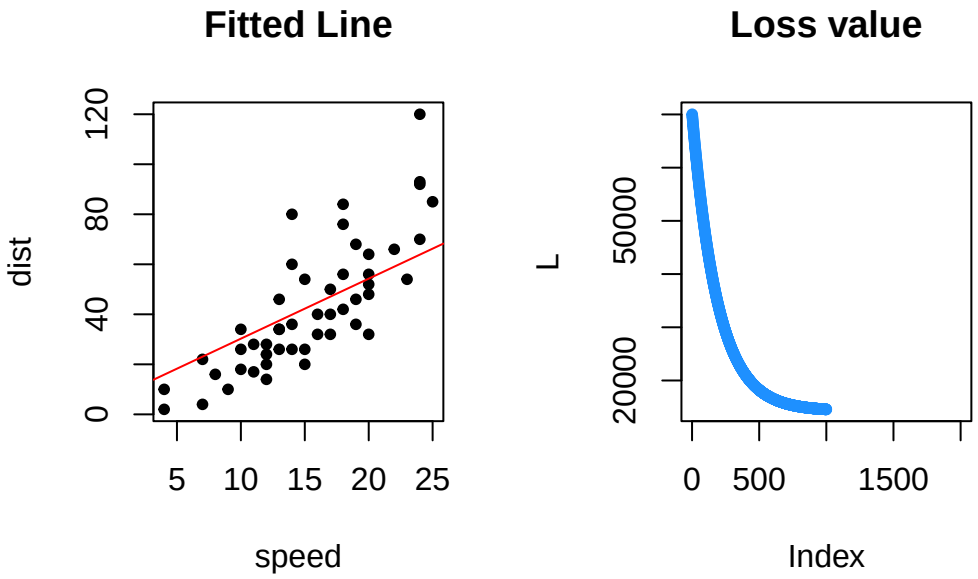
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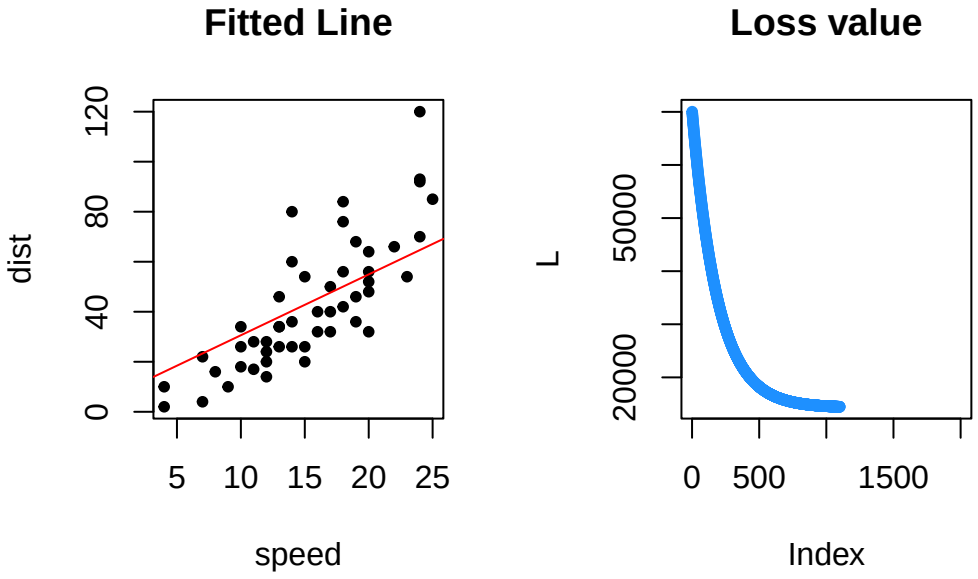
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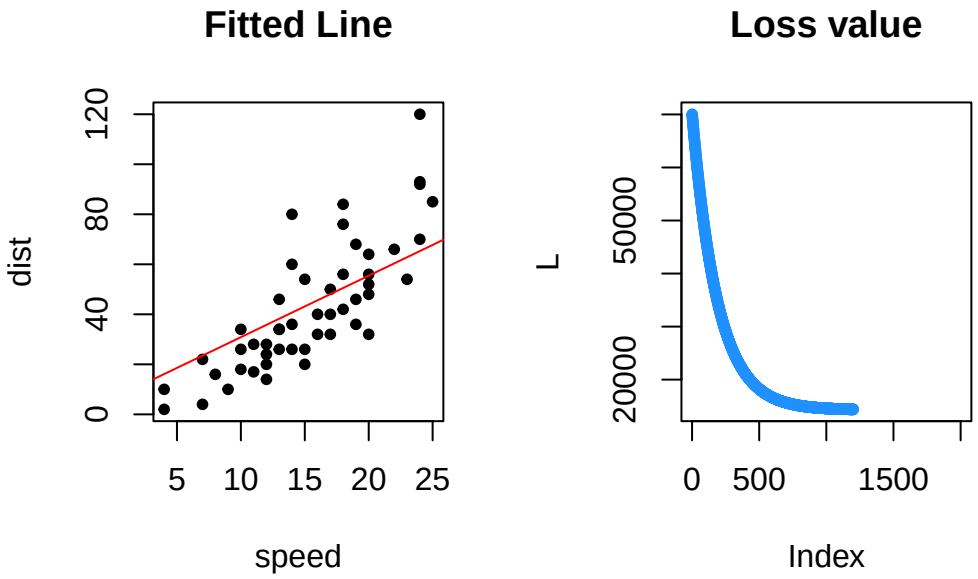
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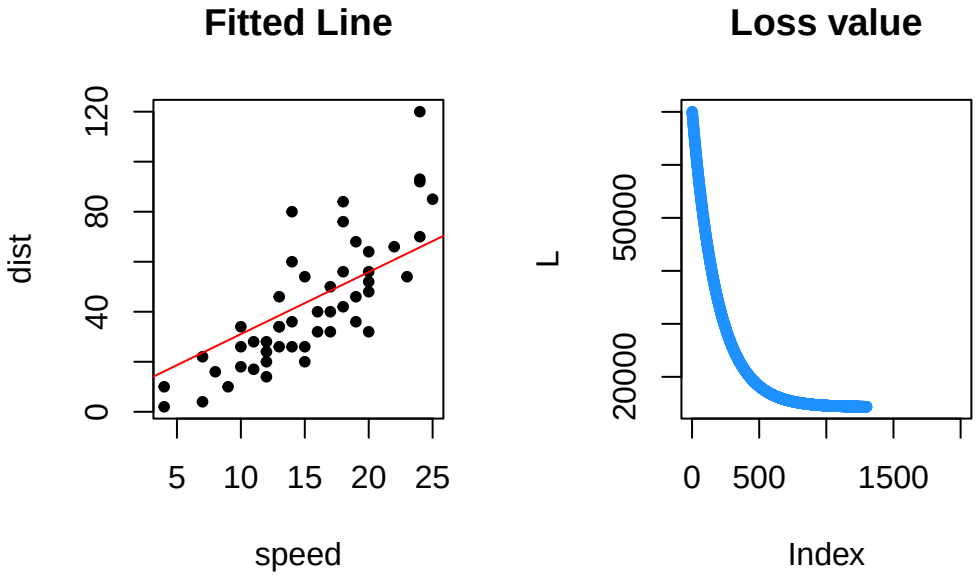
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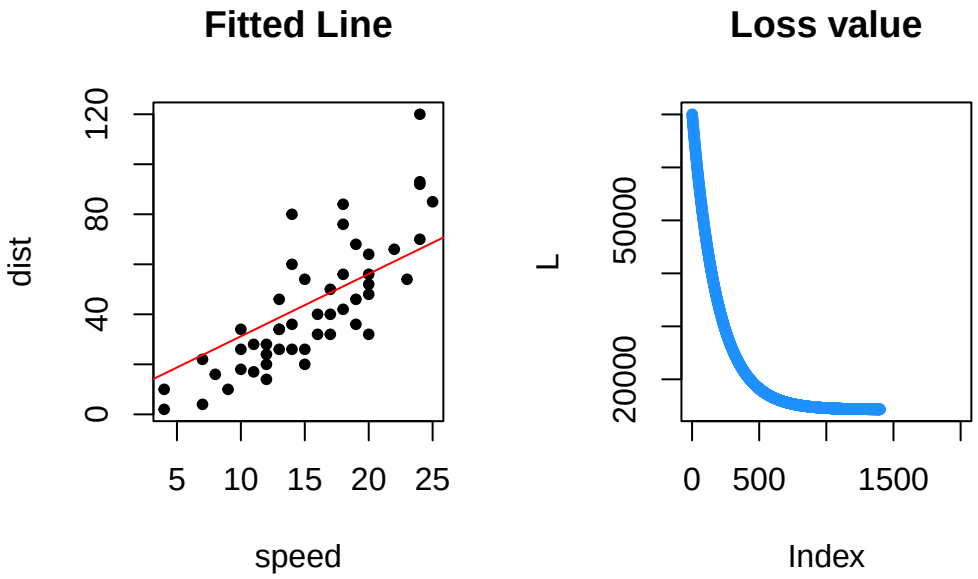
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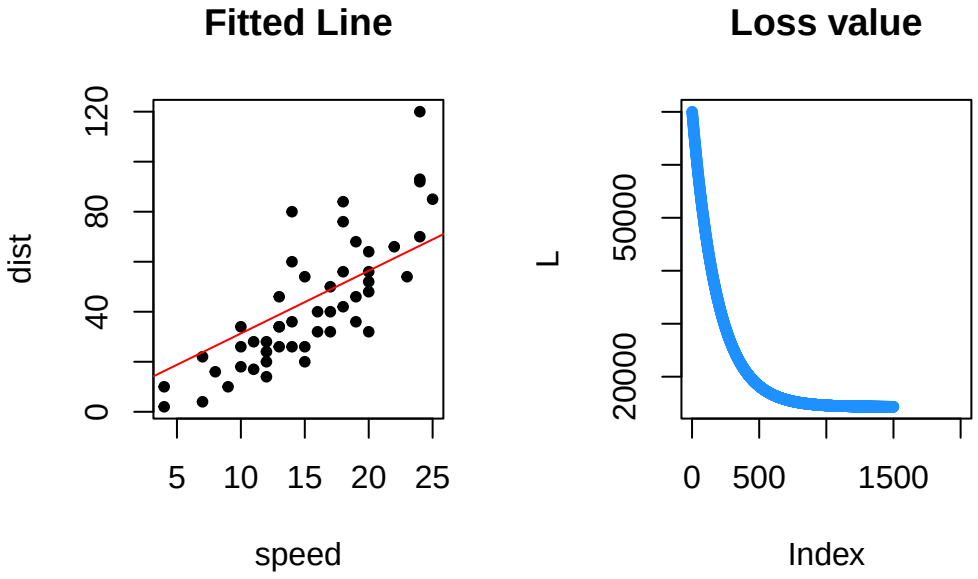
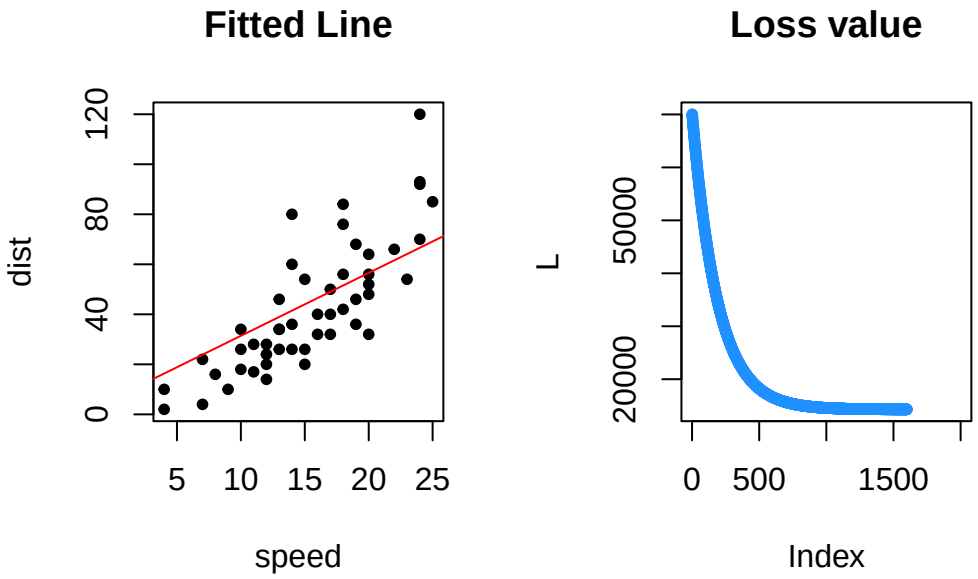
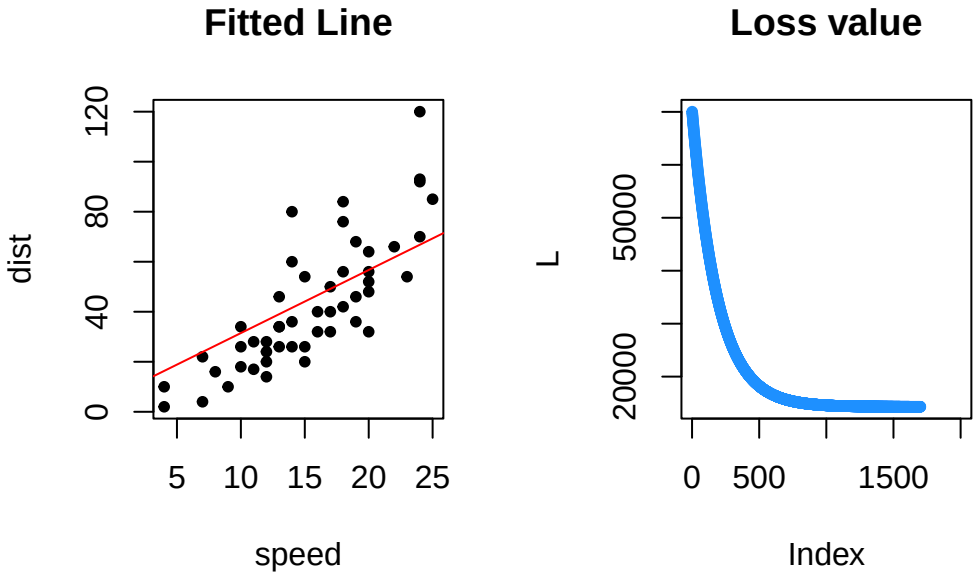
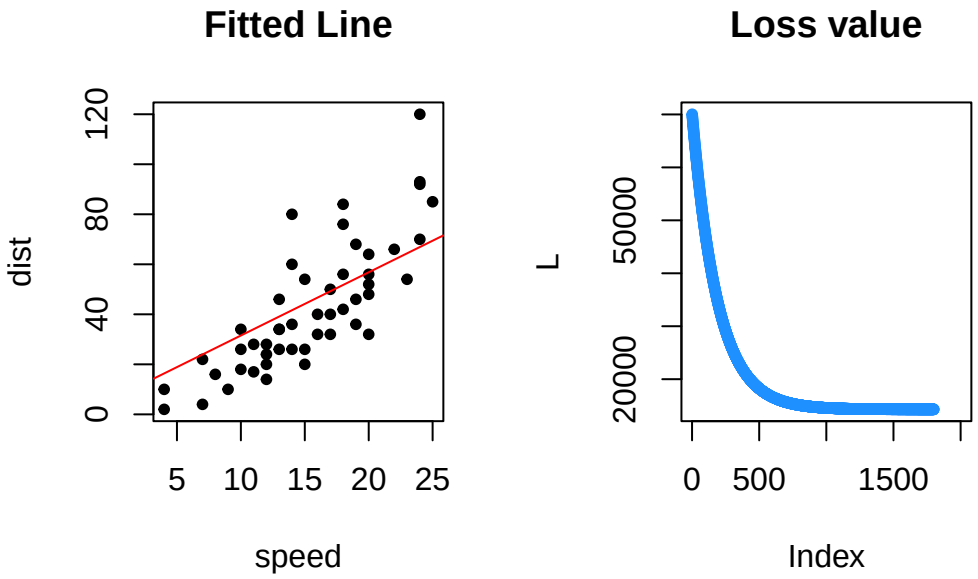
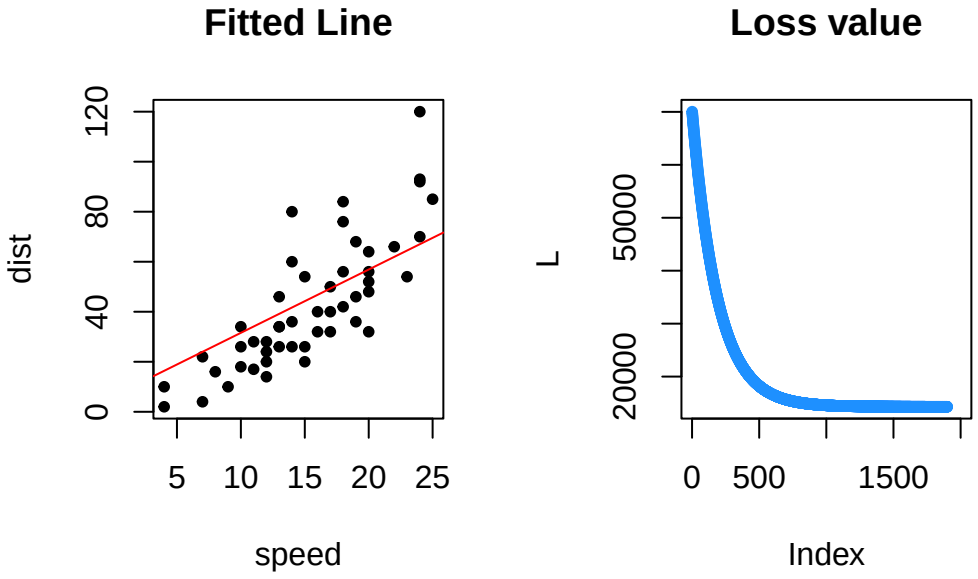
1500
Index

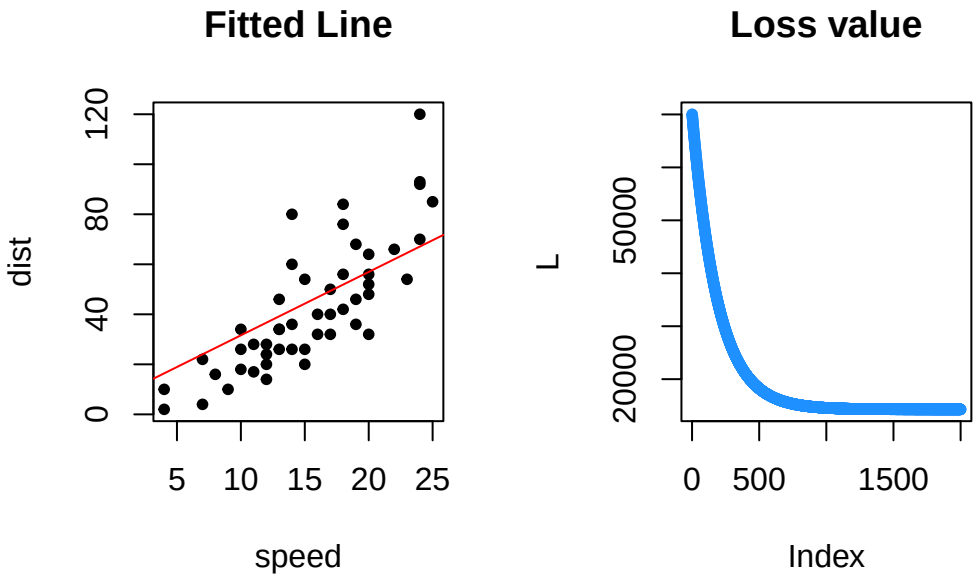

Fitted Line
dist
0
40
80
120
5
10
15
20
25
speed
Loss value
L
20000
50000
0
500
1500
Index


Fitted Line
dist
0
40
80
120
5
10
15
20
25
speed
Loss value
L
20000
50000
0
500
1500
Index


Fitted Line
dist
0
40
80
120
5
10
15
20
25
speed
Loss value
L
20000
50000
0
500
1500
Index


Fitted Line
dist
0
40
80
120
5
10
15
20
25
speed
Loss value
L
20000
50000
0
500
1500
Index


Fitted Line
dist
0
40
80
120
5
10
15
20
25
speed
Loss value
L
20000
50000
0
500
1500
Index



Thursday, Feb 23

> **!** TIL
>
> Include a *very brief* summary of what you learnt in this class here.
> Today, I learnt the following concepts in class:
>
> 1. Automatic differentiation
> 2. Cross validation
> 3. k-fold Cross Validation

Automatic differentiation

- Get rid of functions that are long/tedious to write out (ex. the gradient descent function we wrote before) and numerical instability
- Want to be able to write out loss function & automatically be able to calculate loss for each parameter
- Automatic differentiation helps calculate gradients for any function without the need to solve tedious calculus problems

```r
# vector of 5 values
# c(5,1) tells shape --> 5 rows, 1 column
# 2nd part says that it's matrix, so you can calculate the gradient descent
x <- torch_randn(c(5,1), requires_grad = TRUE)
x
```

```
torch_tensor
-0.7279
-0.1752
 0.9803
 1.1084
 0.6401
[ CPUFloatType{5,1} ][ requires_grad = TRUE ]
```

- matrix = 2D tensor
- vector = 1D tensor

```r
# sqrt(sum(as_array(x)^2)^10 is what torch_norm does
f <- function(x){
  torch_norm(x)^10
}

y <- f(x)
y
```

```
torch_tensor
315.086
[ CPUFloatType{} ][ grad_fn = <PowBackward0> ]
```

```r
# this stops compiler from keeping track of changes to x & start computing gradients
y$backward()
```

```r
x$grad
```

```
torch_tensor
 -725.8390
 -174.7295
  977.4725
 1105.2365
```

```
  638.2624
[ CPUFloatType{5,1} ]
```

```
(5*torch_norm(x)^8) * (2*x)
```

```
torch_tensor
 -725.8390
 -174.7295
  977.4725
 1105.2365
  638.2624
[ CPUFloatType{5,1} ][ grad_fn = <MulBackward0> ]
```

```
x <- torch_randn(c(10,1), requires_grad = TRUE)
x
```

```
torch_tensor
-1.9910
 0.2996
 2.1095
-1.0804
 0.7260
-0.1621
 0.3113
 0.6922
 1.3054
-0.3532
[ CPUFloatType{10,1} ][ requires_grad = TRUE ]
```

```
y <- torch_randn(c(10,1), requires_grad = TRUE)
y
```

```
torch_tensor
 0.9415
-0.4027
 1.3492
-0.7483
-0.6175
```

```
 1.6725
-1.5273
-0.2664
 0.3182
 0.1204
[ CPUFloatType{10,1} ][ requires_grad = TRUE ]
```

```
f <- function(x,y) {
  sum(x*y)
}

z <- f(x,y)
z
```

```
torch_tensor
0.65313
[ CPUFloatType{} ][ grad_fn = <SumBackward0> ]
```

```
z$backward()
```

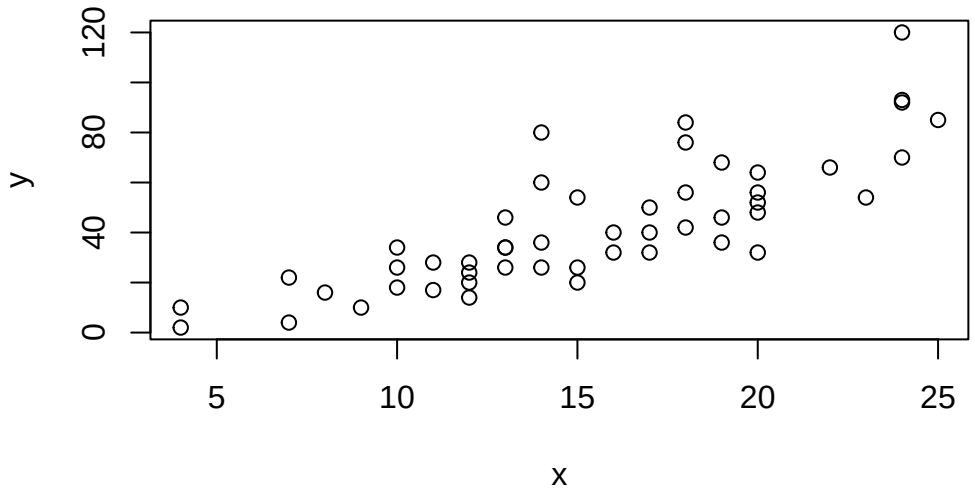
```
c(x$grad, y$grad)
```

```
[[1]]
torch_tensor
 0.9415
-0.4027
 1.3492
-0.7483
-0.6175
 1.6725
-1.5273
-0.2664
 0.3182
 0.1204
[ CPUFloatType{10,1} ]

[[2]]
torch_tensor
-1.9910
```

```
 0.2996
 2.1095
-1.0804
 0.7260
-0.1621
 0.3113
 0.6922
 1.3054
-0.3532
[ CPUFloatType{10,1} ]
```

Example of automatic differentiation using the cars data set

```
# using the speed and distance variables
x <- torch_tensor(cars$speed, dtype = torch_float())
y <- torch_tensor(cars$dist, dtype = torch_float())

plot(x,y)
```




```
b <- torch_zeros(c(2,1), dtype=torch_float(), requires_grad= TRUE)
b
```

```
torch_tensor
 0
 0
[ CPUFloatType{2,1} ][ requires_grad = TRUE ]
```

```
loss <- nn_mse_loss()
```

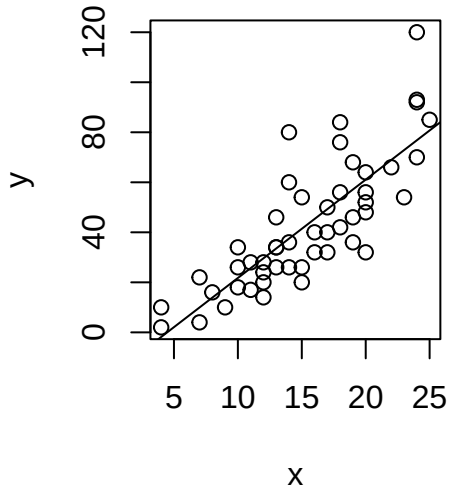
```
b <- torch_zeros(c(2,1), dtype=torch_float(), requires_grad = TRUE)
steps <- 5000
L <- rep(Inf, steps)
eta <- 0.5
optimizer <- optim_adam(b, lr=eta)


# boiler plate for any optimization that we do
for (i in 1:steps){
  # compute predicted value (contains slope and intercept)
  y_hat <- x * b[2] + b[1]
  # compute loss l (want to compute gradient with respect to loss)
  l <- loss(y_hat,y)

  L[i] <- l$item()
  optimizer$zero_grad()
  # tells to stop here and take gradient from here
  l$backward()
  # tells to take step in direction of negative gradient for thing inside optimizer
  optimizer$step() # more intelligent optimizer than previous formula used

  if(i %in% c(1:10) || i %% 200 == 0){
    cat(sprintf("Iteration: %s\t Loss value: %s\n", i, L[i]))
  }
}
```

```
Iteration: 1     Loss value: 2498.06005859375
Iteration: 2     Loss value: 1759.53002929688
Iteration: 3     Loss value: 1174.45300292969
Iteration: 4     Loss value: 742.353759765625
Iteration: 5     Loss value: 457.703643798828
Iteration: 6     Loss value: 307.684936523438
Iteration: 7     Loss value: 270.263397216797
Iteration: 8     Loss value: 314.067993164062
```

```
Iteration: 9     Loss value: 401.761566162109
Iteration: 10    Loss value: 496.908325195312
Iteration: 200   Loss value: 231.474166870117
Iteration: 400   Loss value: 227.114730834961
Iteration: 600   Loss value: 227.070495605469
Iteration: 800   Loss value: 227.070404052734
Iteration: 1000  Loss value: 227.070404052734
Iteration: 1200  Loss value: 227.070404052734
Iteration: 1400  Loss value: 227.070404052734
Iteration: 1600  Loss value: 227.070404052734
Iteration: 1800  Loss value: 227.070404052734
Iteration: 2000  Loss value: 227.070404052734
Iteration: 2200  Loss value: 227.070404052734
Iteration: 2400  Loss value: 227.070434570312
Iteration: 2600  Loss value: 227.070434570312
Iteration: 2800  Loss value: 227.070434570312
Iteration: 3000  Loss value: 227.070434570312
Iteration: 3200  Loss value: 227.070434570312
Iteration: 3400  Loss value: 227.070388793945
Iteration: 3600  Loss value: 227.070404052734
Iteration: 3800  Loss value: 227.070434570312
Iteration: 4000  Loss value: 227.070404052734
Iteration: 4200  Loss value: 227.070434570312
Iteration: 4400  Loss value: 227.070434570312
Iteration: 4600  Loss value: 227.070434570312
Iteration: 4800  Loss value: 227.070404052734
Iteration: 5000  Loss value: 227.070404052734
```

- Brings the loss down on a much quicker trajectory

```
options(repr.plot.width = 12, repr.plot.height = 7)

par(mfrow=c(1,2))
plot(x,y)

abline(as_array(b))
```



Cross Validation

```
df <- Boston %>% drop_na()
head(df)
```

```
     crim zn indus chas   nox    rm  age    dis rad tax ptratio lstat medv
1 0.00632 18  2.31    0 0.538 6.575 65.2 4.0900   1 296    15.3  4.98 24.0
2 0.02731  0  7.07    0 0.469 6.421 78.9 4.9671   2 242    17.8  9.14 21.6
3 0.02729  0  7.07    0 0.469 7.185 61.1 4.9671   2 242    17.8  4.03 34.7
4 0.03237  0  2.18    0 0.458 6.998 45.8 6.0622   3 222    18.7  2.94 33.4
5 0.06905  0  2.18    0 0.458 7.147 54.2 6.0622   3 222    18.7  5.33 36.2
6 0.02985  0  2.18    0 0.458 6.430 58.7 6.0622   3 222    18.7  5.21 28.7
```

```
dim(df)
```

```
[1] 506  13
```

Spliting data into training (80%) and testing sets (20%)

```r
k <- 5
fold <- sample(1:nrow(df), nrow(df)/5)
fold
```

```
 [1] 155  90 305 129 357 256 439 314 497 191  48  26 128 457 269 220  47 112
[19] 219 294 407 170 494 214 132 464 193 317 102 259 501 448 453 433 236 336
[37] 300 131  64  20 246 356 228 417 347 245 270 485  56 141 113 503 140 315
[55] 458  11   4 160 479 111 134 285 400  87 504 250 198 339 215 293  51 477
[73] 383  23 434 283 475  80  10 258 152 266 216 122 185 375 445 381  46 316
[91] 429 146 118 460 225  86  44 107 345 369  29
```

- AIC is a goodness of fit parameter (similar to R^2)
- only creating model using training data
- use parameters from that model to predict what the values would be on test set
- see the discrepancy between predicted value and actual error (test error)

```r
train <- df %>% slice(-fold)
test <- df %>% slice(fold)
```

```r
model <- lm(medv ~., data = train)
summary(model)
```

```
Call:
lm(formula = medv ~ ., data = train)

Residuals:
     Min       1Q   Median       3Q      Max
-16.5027  -2.7922  -0.4954   2.0231  25.6294

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept)  37.465622   5.670875   6.607 1.28e-10 ***
crim         -0.111102   0.040271  -2.759 0.006073 **
zn            0.043026   0.015500   2.776 0.005769 **
indus         0.050516   0.068916   0.733 0.463987
chas          3.316768   0.965871   3.434 0.000658 ***
nox         -17.567133   4.361545  -4.028 6.76e-05 ***
rm            4.073586   0.479453   8.496 4.13e-16 ***
age           0.007568   0.015361   0.493 0.622538
```

```
dis          -1.376027   0.229657  -5.992 4.71e-09 ***
rad           0.265253   0.074860   3.543 0.000443 ***
tax          -0.012673   0.004126  -3.072 0.002278 **
ptratio      -0.946660   0.154025  -6.146 1.95e-09 ***
lstat        -0.542665   0.059614  -9.103  < 2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 4.847 on 392 degrees of freedom
Multiple R-squared:  0.7384,    Adjusted R-squared:  0.7304
F-statistic: 92.23 on 12 and 392 DF,  p-value: < 2.2e-16
```

```r
y_test <- predict(model, newdata = test)
```

```r
# mean squared prediction error
mspe <- mean((test$medv - y_test)^2)
mspe
```

```
[1] 21.8061
```

- If you make training/testing 50-50, then the mspe will decrease/increase??
    1. This depends on the portion of data that is selected in the 50% training set
- To get rid of variability, use "k-fold cross validation"

k-Fold Cross Validation

- uses similar logic as before but now you pick number of folds
- split data into k disjoint subsets of rows
    1. 1000 rows becomes k datasets of 1000/k rows
- then you select 1 of the 5 datasets as test, and rest as training set
- train on 4, predict on test and make mspe
- do this for all 5 blocks, using each as test
- have a mspe for every fold (in this case have 5 mspe's)
- find average of those mspe

```r
k <- 5
folds <- sample(1:k, nrow(df), replace = T)
```

```r
df_folds <- list()

for (i in 1:k){
  df_folds[[i]] <- list()
  df_folds[[i]]$train = df
}

df_folds
```

```
[[1]]
[[1]]$train
        crim    zn indus chas    nox    rm   age     dis rad tax ptratio lstat
1    0.00632  18.0  2.31    0 0.5380 6.575  65.2  4.0900   1 296    15.3  4.98
2    0.02731   0.0  7.07    0 0.4690 6.421  78.9  4.9671   2 242    17.8  9.14
3    0.02729   0.0  7.07    0 0.4690 7.185  61.1  4.9671   2 242    17.8  4.03
4    0.03237   0.0  2.18    0 0.4580 6.998  45.8  6.0622   3 222    18.7  2.94
5    0.06905   0.0  2.18    0 0.4580 7.147  54.2  6.0622   3 222    18.7  5.33
6    0.02985   0.0  2.18    0 0.4580 6.430  58.7  6.0622   3 222    18.7  5.21
7    0.08829  12.5  7.87    0 0.5240 6.012  66.6  5.5605   5 311    15.2 12.43
8    0.14455  12.5  7.87    0 0.5240 6.172  96.1  5.9505   5 311    15.2 19.15
9    0.21124  12.5  7.87    0 0.5240 5.631 100.0  6.0821   5 311    15.2 29.93
10   0.17004  12.5  7.87    0 0.5240 6.004  85.9  6.5921   5 311    15.2 17.10
11   0.22489  12.5  7.87    0 0.5240 6.377  94.3  6.3467   5 311    15.2 20.45
12   0.11747  12.5  7.87    0 0.5240 6.009  82.9  6.2267   5 311    15.2 13.27
13   0.09378  12.5  7.87    0 0.5240 5.889  39.0  5.4509   5 311    15.2 15.71
14   0.62976   0.0  8.14    0 0.5380 5.949  61.8  4.7075   4 307    21.0  8.26
15   0.63796   0.0  8.14    0 0.5380 6.096  84.5  4.4619   4 307    21.0 10.26
16   0.62739   0.0  8.14    0 0.5380 5.834  56.5  4.4986   4 307    21.0  8.47
17   1.05393   0.0  8.14    0 0.5380 5.935  29.3  4.4986   4 307    21.0  6.58
18   0.78420   0.0  8.14    0 0.5380 5.990  81.7  4.2579   4 307    21.0 14.67
19   0.80271   0.0  8.14    0 0.5380 5.456  36.6  3.7965   4 307    21.0 11.69
20   0.72580   0.0  8.14    0 0.5380 5.727  69.5  3.7965   4 307    21.0 11.28
21   1.25179   0.0  8.14    0 0.5380 5.570  98.1  3.7979   4 307    21.0 21.02
22   0.85204   0.0  8.14    0 0.5380 5.965  89.2  4.0123   4 307    21.0 13.83
23   1.23247   0.0  8.14    0 0.5380 6.142  91.7  3.9769   4 307    21.0 18.72
24   0.98843   0.0  8.14    0 0.5380 5.813 100.0  4.0952   4 307    21.0 19.88
25   0.75026   0.0  8.14    0 0.5380 5.924  94.1  4.3996   4 307    21.0 16.30
26   0.84054   0.0  8.14    0 0.5380 5.599  85.7  4.4546   4 307    21.0 16.51
27   0.67191   0.0  8.14    0 0.5380 5.813  90.3  4.6820   4 307    21.0 14.81
28   0.95577   0.0  8.14    0 0.5380 6.047  88.8  4.4534   4 307    21.0 17.28
29   0.77299   0.0  8.14    0 0.5380 6.495  94.4  4.4547   4 307    21.0 12.80
30   1.00245   0.0  8.14    0 0.5380 6.674  87.3  4.2390   4 307    21.0 11.98
```

31	1.13081	0.0	8.14	0	0.5380	5.713	94.1	4.2330	4	307	21.0	22.60
32	1.35472	0.0	8.14	0	0.5380	6.072	100.0	4.1750	4	307	21.0	13.04
33	1.38799	0.0	8.14	0	0.5380	5.950	82.0	3.9900	4	307	21.0	27.71
34	1.15172	0.0	8.14	0	0.5380	5.701	95.0	3.7872	4	307	21.0	18.35
35	1.61282	0.0	8.14	0	0.5380	6.096	96.9	3.7598	4	307	21.0	20.34
36	0.06417	0.0	5.96	0	0.4990	5.933	68.2	3.3603	5	279	19.2	9.68
37	0.09744	0.0	5.96	0	0.4990	5.841	61.4	3.3779	5	279	19.2	11.41
38	0.08014	0.0	5.96	0	0.4990	5.850	41.5	3.9342	5	279	19.2	8.77
39	0.17505	0.0	5.96	0	0.4990	5.966	30.2	3.8473	5	279	19.2	10.13
40	0.02763	75.0	2.95	0	0.4280	6.595	21.8	5.4011	3	252	18.3	4.32
41	0.03359	75.0	2.95	0	0.4280	7.024	15.8	5.4011	3	252	18.3	1.98
42	0.12744	0.0	6.91	0	0.4480	6.770	2.9	5.7209	3	233	17.9	4.84
43	0.14150	0.0	6.91	0	0.4480	6.169	6.6	5.7209	3	233	17.9	5.81
44	0.15936	0.0	6.91	0	0.4480	6.211	6.5	5.7209	3	233	17.9	7.44
45	0.12269	0.0	6.91	0	0.4480	6.069	40.0	5.7209	3	233	17.9	9.55
46	0.17142	0.0	6.91	0	0.4480	5.682	33.8	5.1004	3	233	17.9	10.21
47	0.18836	0.0	6.91	0	0.4480	5.786	33.3	5.1004	3	233	17.9	14.15
48	0.22927	0.0	6.91	0	0.4480	6.030	85.5	5.6894	3	233	17.9	18.80
49	0.25387	0.0	6.91	0	0.4480	5.399	95.3	5.8700	3	233	17.9	30.81
50	0.21977	0.0	6.91	0	0.4480	5.602	62.0	6.0877	3	233	17.9	16.20
51	0.08873	21.0	5.64	0	0.4390	5.963	45.7	6.8147	4	243	16.8	13.45
52	0.04337	21.0	5.64	0	0.4390	6.115	63.0	6.8147	4	243	16.8	9.43
53	0.05360	21.0	5.64	0	0.4390	6.511	21.1	6.8147	4	243	16.8	5.28
54	0.04981	21.0	5.64	0	0.4390	5.998	21.4	6.8147	4	243	16.8	8.43
55	0.01360	75.0	4.00	0	0.4100	5.888	47.6	7.3197	3	469	21.1	14.80
56	0.01311	90.0	1.22	0	0.4030	7.249	21.9	8.6966	5	226	17.9	4.81
57	0.02055	85.0	0.74	0	0.4100	6.383	35.7	9.1876	2	313	17.3	5.77
58	0.01432	100.0	1.32	0	0.4110	6.816	40.5	8.3248	5	256	15.1	3.95
59	0.15445	25.0	5.13	0	0.4530	6.145	29.2	7.8148	8	284	19.7	6.86
60	0.10328	25.0	5.13	0	0.4530	5.927	47.2	6.9320	8	284	19.7	9.22
61	0.14932	25.0	5.13	0	0.4530	5.741	66.2	7.2254	8	284	19.7	13.15
62	0.17171	25.0	5.13	0	0.4530	5.966	93.4	6.8185	8	284	19.7	14.44
63	0.11027	25.0	5.13	0	0.4530	6.456	67.8	7.2255	8	284	19.7	6.73
64	0.12650	25.0	5.13	0	0.4530	6.762	43.4	7.9809	8	284	19.7	9.50
65	0.01951	17.5	1.38	0	0.4161	7.104	59.5	9.2229	3	216	18.6	8.05
66	0.03584	80.0	3.37	0	0.3980	6.290	17.8	6.6115	4	337	16.1	4.67
67	0.04379	80.0	3.37	0	0.3980	5.787	31.1	6.6115	4	337	16.1	10.24
68	0.05789	12.5	6.07	0	0.4090	5.878	21.4	6.4980	4	345	18.9	8.10
69	0.13554	12.5	6.07	0	0.4090	5.594	36.8	6.4980	4	345	18.9	13.09
70	0.12816	12.5	6.07	0	0.4090	5.885	33.0	6.4980	4	345	18.9	8.79
71	0.08826	0.0	10.81	0	0.4130	6.417	6.6	5.2873	4	305	19.2	6.72
72	0.15876	0.0	10.81	0	0.4130	5.961	17.5	5.2873	4	305	19.2	9.88
73	0.09164	0.0	10.81	0	0.4130	6.065	7.8	5.2873	4	305	19.2	5.52

74	0.19539	0.0	10.81	0	0.4130	6.245	6.2	5.2873	4	305	19.2	7.54
75	0.07896	0.0	12.83	0	0.4370	6.273	6.0	4.2515	5	398	18.7	6.78
76	0.09512	0.0	12.83	0	0.4370	6.286	45.0	4.5026	5	398	18.7	8.94
77	0.10153	0.0	12.83	0	0.4370	6.279	74.5	4.0522	5	398	18.7	11.97
78	0.08707	0.0	12.83	0	0.4370	6.140	45.8	4.0905	5	398	18.7	10.27
79	0.05646	0.0	12.83	0	0.4370	6.232	53.7	5.0141	5	398	18.7	12.34
80	0.08387	0.0	12.83	0	0.4370	5.874	36.6	4.5026	5	398	18.7	9.10
81	0.04113	25.0	4.86	0	0.4260	6.727	33.5	5.4007	4	281	19.0	5.29
82	0.04462	25.0	4.86	0	0.4260	6.619	70.4	5.4007	4	281	19.0	7.22
83	0.03659	25.0	4.86	0	0.4260	6.302	32.2	5.4007	4	281	19.0	6.72
84	0.03551	25.0	4.86	0	0.4260	6.167	46.7	5.4007	4	281	19.0	7.51
85	0.05059	0.0	4.49	0	0.4490	6.389	48.0	4.7794	3	247	18.5	9.62
86	0.05735	0.0	4.49	0	0.4490	6.630	56.1	4.4377	3	247	18.5	6.53
87	0.05188	0.0	4.49	0	0.4490	6.015	45.1	4.4272	3	247	18.5	12.86
88	0.07151	0.0	4.49	0	0.4490	6.121	56.8	3.7476	3	247	18.5	8.44
89	0.05660	0.0	3.41	0	0.4890	7.007	86.3	3.4217	2	270	17.8	5.50
90	0.05302	0.0	3.41	0	0.4890	7.079	63.1	3.4145	2	270	17.8	5.70
91	0.04684	0.0	3.41	0	0.4890	6.417	66.1	3.0923	2	270	17.8	8.81
92	0.03932	0.0	3.41	0	0.4890	6.405	73.9	3.0921	2	270	17.8	8.20
93	0.04203	28.0	15.04	0	0.4640	6.442	53.6	3.6659	4	270	18.2	8.16
94	0.02875	28.0	15.04	0	0.4640	6.211	28.9	3.6659	4	270	18.2	6.21
95	0.04294	28.0	15.04	0	0.4640	6.249	77.3	3.6150	4	270	18.2	10.59
96	0.12204	0.0	2.89	0	0.4450	6.625	57.8	3.4952	2	276	18.0	6.65
97	0.11504	0.0	2.89	0	0.4450	6.163	69.6	3.4952	2	276	18.0	11.34
98	0.12083	0.0	2.89	0	0.4450	8.069	76.0	3.4952	2	276	18.0	4.21
99	0.08187	0.0	2.89	0	0.4450	7.820	36.9	3.4952	2	276	18.0	3.57
100	0.06860	0.0	2.89	0	0.4450	7.416	62.5	3.4952	2	276	18.0	6.19
101	0.14866	0.0	8.56	0	0.5200	6.727	79.9	2.7778	5	384	20.9	9.42
102	0.11432	0.0	8.56	0	0.5200	6.781	71.3	2.8561	5	384	20.9	7.67
103	0.22876	0.0	8.56	0	0.5200	6.405	85.4	2.7147	5	384	20.9	10.63
104	0.21161	0.0	8.56	0	0.5200	6.137	87.4	2.7147	5	384	20.9	13.44
105	0.13960	0.0	8.56	0	0.5200	6.167	90.0	2.4210	5	384	20.9	12.33
106	0.13262	0.0	8.56	0	0.5200	5.851	96.7	2.1069	5	384	20.9	16.47
107	0.17120	0.0	8.56	0	0.5200	5.836	91.9	2.2110	5	384	20.9	18.66
108	0.13117	0.0	8.56	0	0.5200	6.127	85.2	2.1224	5	384	20.9	14.09
109	0.12802	0.0	8.56	0	0.5200	6.474	97.1	2.4329	5	384	20.9	12.27
110	0.26363	0.0	8.56	0	0.5200	6.229	91.2	2.5451	5	384	20.9	15.55
111	0.10793	0.0	8.56	0	0.5200	6.195	54.4	2.7778	5	384	20.9	13.00
112	0.10084	0.0	10.01	0	0.5470	6.715	81.6	2.6775	6	432	17.8	10.16
113	0.12329	0.0	10.01	0	0.5470	5.913	92.9	2.3534	6	432	17.8	16.21
114	0.22212	0.0	10.01	0	0.5470	6.092	95.4	2.5480	6	432	17.8	17.09
115	0.14231	0.0	10.01	0	0.5470	6.254	84.2	2.2565	6	432	17.8	10.45
116	0.17134	0.0	10.01	0	0.5470	5.928	88.2	2.4631	6	432	17.8	15.76

117	0.13158	0.0	10.01	0	0.5470	6.176	72.5	2.7301	6	432	17.8	12.04
118	0.15098	0.0	10.01	0	0.5470	6.021	82.6	2.7474	6	432	17.8	10.30
119	0.13058	0.0	10.01	0	0.5470	5.872	73.1	2.4775	6	432	17.8	15.37
120	0.14476	0.0	10.01	0	0.5470	5.731	65.2	2.7592	6	432	17.8	13.61
121	0.06899	0.0	25.65	0	0.5810	5.870	69.7	2.2577	2	188	19.1	14.37
122	0.07165	0.0	25.65	0	0.5810	6.004	84.1	2.1974	2	188	19.1	14.27
123	0.09299	0.0	25.65	0	0.5810	5.961	92.9	2.0869	2	188	19.1	17.93
124	0.15038	0.0	25.65	0	0.5810	5.856	97.0	1.9444	2	188	19.1	25.41
125	0.09849	0.0	25.65	0	0.5810	5.879	95.8	2.0063	2	188	19.1	17.58
126	0.16902	0.0	25.65	0	0.5810	5.986	88.4	1.9929	2	188	19.1	14.81
127	0.38735	0.0	25.65	0	0.5810	5.613	95.6	1.7572	2	188	19.1	27.26
128	0.25915	0.0	21.89	0	0.6240	5.693	96.0	1.7883	4	437	21.2	17.19
129	0.32543	0.0	21.89	0	0.6240	6.431	98.8	1.8125	4	437	21.2	15.39
130	0.88125	0.0	21.89	0	0.6240	5.637	94.7	1.9799	4	437	21.2	18.34
131	0.34006	0.0	21.89	0	0.6240	6.458	98.9	2.1185	4	437	21.2	12.60
132	1.19294	0.0	21.89	0	0.6240	6.326	97.7	2.2710	4	437	21.2	12.26
133	0.59005	0.0	21.89	0	0.6240	6.372	97.9	2.3274	4	437	21.2	11.12
134	0.32982	0.0	21.89	0	0.6240	5.822	95.4	2.4699	4	437	21.2	15.03
135	0.97617	0.0	21.89	0	0.6240	5.757	98.4	2.3460	4	437	21.2	17.31
136	0.55778	0.0	21.89	0	0.6240	6.335	98.2	2.1107	4	437	21.2	16.96
137	0.32264	0.0	21.89	0	0.6240	5.942	93.5	1.9669	4	437	21.2	16.90
138	0.35233	0.0	21.89	0	0.6240	6.454	98.4	1.8498	4	437	21.2	14.59
139	0.24980	0.0	21.89	0	0.6240	5.857	98.2	1.6686	4	437	21.2	21.32
140	0.54452	0.0	21.89	0	0.6240	6.151	97.9	1.6687	4	437	21.2	18.46
141	0.29090	0.0	21.89	0	0.6240	6.174	93.6	1.6119	4	437	21.2	24.16
142	1.62864	0.0	21.89	0	0.6240	5.019	100.0	1.4394	4	437	21.2	34.41
143	3.32105	0.0	19.58	1	0.8710	5.403	100.0	1.3216	5	403	14.7	26.82
144	4.09740	0.0	19.58	0	0.8710	5.468	100.0	1.4118	5	403	14.7	26.42
145	2.77974	0.0	19.58	0	0.8710	4.903	97.8	1.3459	5	403	14.7	29.29
146	2.37934	0.0	19.58	0	0.8710	6.130	100.0	1.4191	5	403	14.7	27.80
147	2.15505	0.0	19.58	0	0.8710	5.628	100.0	1.5166	5	403	14.7	16.65
148	2.36862	0.0	19.58	0	0.8710	4.926	95.7	1.4608	5	403	14.7	29.53
149	2.33099	0.0	19.58	0	0.8710	5.186	93.8	1.5296	5	403	14.7	28.32
150	2.73397	0.0	19.58	0	0.8710	5.597	94.9	1.5257	5	403	14.7	21.45
151	1.65660	0.0	19.58	0	0.8710	6.122	97.3	1.6180	5	403	14.7	14.10
152	1.49632	0.0	19.58	0	0.8710	5.404	100.0	1.5916	5	403	14.7	13.28
153	1.12658	0.0	19.58	1	0.8710	5.012	88.0	1.6102	5	403	14.7	12.12
154	2.14918	0.0	19.58	0	0.8710	5.709	98.5	1.6232	5	403	14.7	15.79
155	1.41385	0.0	19.58	1	0.8710	6.129	96.0	1.7494	5	403	14.7	15.12
156	3.53501	0.0	19.58	1	0.8710	6.152	82.6	1.7455	5	403	14.7	15.02
157	2.44668	0.0	19.58	0	0.8710	5.272	94.0	1.7364	5	403	14.7	16.14
158	1.22358	0.0	19.58	0	0.6050	6.943	97.4	1.8773	5	403	14.7	4.59
159	1.34284	0.0	19.58	0	0.6050	6.066	100.0	1.7573	5	403	14.7	6.43

160	1.42502	0.0	19.58	0	0.8710	6.510	100.0	1.7659	5	403	14.7	7.39
161	1.27346	0.0	19.58	1	0.6050	6.250	92.6	1.7984	5	403	14.7	5.50
162	1.46336	0.0	19.58	0	0.6050	7.489	90.8	1.9709	5	403	14.7	1.73
163	1.83377	0.0	19.58	1	0.6050	7.802	98.2	2.0407	5	403	14.7	1.92
164	1.51902	0.0	19.58	1	0.6050	8.375	93.9	2.1620	5	403	14.7	3.32
165	2.24236	0.0	19.58	0	0.6050	5.854	91.8	2.4220	5	403	14.7	11.64
166	2.92400	0.0	19.58	0	0.6050	6.101	93.0	2.2834	5	403	14.7	9.81
167	2.01019	0.0	19.58	0	0.6050	7.929	96.2	2.0459	5	403	14.7	3.70
168	1.80028	0.0	19.58	0	0.6050	5.877	79.2	2.4259	5	403	14.7	12.14
169	2.30040	0.0	19.58	0	0.6050	6.319	96.1	2.1000	5	403	14.7	11.10
170	2.44953	0.0	19.58	0	0.6050	6.402	95.2	2.2625	5	403	14.7	11.32
171	1.20742	0.0	19.58	0	0.6050	5.875	94.6	2.4259	5	403	14.7	14.43
172	2.31390	0.0	19.58	0	0.6050	5.880	97.3	2.3887	5	403	14.7	12.03
173	0.13914	0.0	4.05	0	0.5100	5.572	88.5	2.5961	5	296	16.6	14.69
174	0.09178	0.0	4.05	0	0.5100	6.416	84.1	2.6463	5	296	16.6	9.04
175	0.08447	0.0	4.05	0	0.5100	5.859	68.7	2.7019	5	296	16.6	9.64
176	0.06664	0.0	4.05	0	0.5100	6.546	33.1	3.1323	5	296	16.6	5.33
177	0.07022	0.0	4.05	0	0.5100	6.020	47.2	3.5549	5	296	16.6	10.11
178	0.05425	0.0	4.05	0	0.5100	6.315	73.4	3.3175	5	296	16.6	6.29
179	0.06642	0.0	4.05	0	0.5100	6.860	74.4	2.9153	5	296	16.6	6.92
180	0.05780	0.0	2.46	0	0.4880	6.980	58.4	2.8290	3	193	17.8	5.04
181	0.06588	0.0	2.46	0	0.4880	7.765	83.3	2.7410	3	193	17.8	7.56
182	0.06888	0.0	2.46	0	0.4880	6.144	62.2	2.5979	3	193	17.8	9.45
183	0.09103	0.0	2.46	0	0.4880	7.155	92.2	2.7006	3	193	17.8	4.82
184	0.10008	0.0	2.46	0	0.4880	6.563	95.6	2.8470	3	193	17.8	5.68
185	0.08308	0.0	2.46	0	0.4880	5.604	89.8	2.9879	3	193	17.8	13.98
186	0.06047	0.0	2.46	0	0.4880	6.153	68.8	3.2797	3	193	17.8	13.15
187	0.05602	0.0	2.46	0	0.4880	7.831	53.6	3.1992	3	193	17.8	4.45
188	0.07875	45.0	3.44	0	0.4370	6.782	41.1	3.7886	5	398	15.2	6.68
189	0.12579	45.0	3.44	0	0.4370	6.556	29.1	4.5667	5	398	15.2	4.56
190	0.08370	45.0	3.44	0	0.4370	7.185	38.9	4.5667	5	398	15.2	5.39
191	0.09068	45.0	3.44	0	0.4370	6.951	21.5	6.4798	5	398	15.2	5.10
192	0.06911	45.0	3.44	0	0.4370	6.739	30.8	6.4798	5	398	15.2	4.69
193	0.08664	45.0	3.44	0	0.4370	7.178	26.3	6.4798	5	398	15.2	2.87
194	0.02187	60.0	2.93	0	0.4010	6.800	9.9	6.2196	1	265	15.6	5.03
195	0.01439	60.0	2.93	0	0.4010	6.604	18.8	6.2196	1	265	15.6	4.38
196	0.01381	80.0	0.46	0	0.4220	7.875	32.0	5.6484	4	255	14.4	2.97
197	0.04011	80.0	1.52	0	0.4040	7.287	34.1	7.3090	2	329	12.6	4.08
198	0.04666	80.0	1.52	0	0.4040	7.107	36.6	7.3090	2	329	12.6	8.61
199	0.03768	80.0	1.52	0	0.4040	7.274	38.3	7.3090	2	329	12.6	6.62
200	0.03150	95.0	1.47	0	0.4030	6.975	15.3	7.6534	3	402	17.0	4.56
201	0.01778	95.0	1.47	0	0.4030	7.135	13.9	7.6534	3	402	17.0	4.45
202	0.03445	82.5	2.03	0	0.4150	6.162	38.4	6.2700	2	348	14.7	7.43

203	0.02177	82.5	2.03	0	0.4150	7.610	15.7	6.2700	2	348	14.7	3.11
204	0.03510	95.0	2.68	0	0.4161	7.853	33.2	5.1180	4	224	14.7	3.81
205	0.02009	95.0	2.68	0	0.4161	8.034	31.9	5.1180	4	224	14.7	2.88
206	0.13642	0.0	10.59	0	0.4890	5.891	22.3	3.9454	4	277	18.6	10.87
207	0.22969	0.0	10.59	0	0.4890	6.326	52.5	4.3549	4	277	18.6	10.97
208	0.25199	0.0	10.59	0	0.4890	5.783	72.7	4.3549	4	277	18.6	18.06
209	0.13587	0.0	10.59	1	0.4890	6.064	59.1	4.2392	4	277	18.6	14.66
210	0.43571	0.0	10.59	1	0.4890	5.344	100.0	3.8750	4	277	18.6	23.09
211	0.17446	0.0	10.59	1	0.4890	5.960	92.1	3.8771	4	277	18.6	17.27
212	0.37578	0.0	10.59	1	0.4890	5.404	88.6	3.6650	4	277	18.6	23.98
213	0.21719	0.0	10.59	1	0.4890	5.807	53.8	3.6526	4	277	18.6	16.03
214	0.14052	0.0	10.59	0	0.4890	6.375	32.3	3.9454	4	277	18.6	9.38
215	0.28955	0.0	10.59	0	0.4890	5.412	9.8	3.5875	4	277	18.6	29.55
216	0.19802	0.0	10.59	0	0.4890	6.182	42.4	3.9454	4	277	18.6	9.47
217	0.04560	0.0	13.89	1	0.5500	5.888	56.0	3.1121	5	276	16.4	13.51
218	0.07013	0.0	13.89	0	0.5500	6.642	85.1	3.4211	5	276	16.4	9.69
219	0.11069	0.0	13.89	1	0.5500	5.951	93.8	2.8893	5	276	16.4	17.92
220	0.11425	0.0	13.89	1	0.5500	6.373	92.4	3.3633	5	276	16.4	10.50
221	0.35809	0.0	6.20	1	0.5070	6.951	88.5	2.8617	8	307	17.4	9.71
222	0.40771	0.0	6.20	1	0.5070	6.164	91.3	3.0480	8	307	17.4	21.46
223	0.62356	0.0	6.20	1	0.5070	6.879	77.7	3.2721	8	307	17.4	9.93
224	0.61470	0.0	6.20	0	0.5070	6.618	80.8	3.2721	8	307	17.4	7.60
225	0.31533	0.0	6.20	0	0.5040	8.266	78.3	2.8944	8	307	17.4	4.14
226	0.52693	0.0	6.20	0	0.5040	8.725	83.0	2.8944	8	307	17.4	4.63
227	0.38214	0.0	6.20	0	0.5040	8.040	86.5	3.2157	8	307	17.4	3.13
228	0.41238	0.0	6.20	0	0.5040	7.163	79.9	3.2157	8	307	17.4	6.36
229	0.29819	0.0	6.20	0	0.5040	7.686	17.0	3.3751	8	307	17.4	3.92
230	0.44178	0.0	6.20	0	0.5040	6.552	21.4	3.3751	8	307	17.4	3.76
231	0.53700	0.0	6.20	0	0.5040	5.981	68.1	3.6715	8	307	17.4	11.65
232	0.46296	0.0	6.20	0	0.5040	7.412	76.9	3.6715	8	307	17.4	5.25
233	0.57529	0.0	6.20	0	0.5070	8.337	73.3	3.8384	8	307	17.4	2.47
234	0.33147	0.0	6.20	0	0.5070	8.247	70.4	3.6519	8	307	17.4	3.95
235	0.44791	0.0	6.20	1	0.5070	6.726	66.5	3.6519	8	307	17.4	8.05
236	0.33045	0.0	6.20	0	0.5070	6.086	61.5	3.6519	8	307	17.4	10.88
237	0.52058	0.0	6.20	1	0.5070	6.631	76.5	4.1480	8	307	17.4	9.54
238	0.51183	0.0	6.20	0	0.5070	7.358	71.6	4.1480	8	307	17.4	4.73
239	0.08244	30.0	4.93	0	0.4280	6.481	18.5	6.1899	6	300	16.6	6.36
240	0.09252	30.0	4.93	0	0.4280	6.606	42.2	6.1899	6	300	16.6	7.37
241	0.11329	30.0	4.93	0	0.4280	6.897	54.3	6.3361	6	300	16.6	11.38
242	0.10612	30.0	4.93	0	0.4280	6.095	65.1	6.3361	6	300	16.6	12.40
243	0.10290	30.0	4.93	0	0.4280	6.358	52.9	7.0355	6	300	16.6	11.22
244	0.12757	30.0	4.93	0	0.4280	6.393	7.8	7.0355	6	300	16.6	5.19
245	0.20608	22.0	5.86	0	0.4310	5.593	76.5	7.9549	7	330	19.1	12.50

246	0.19133	22.0	5.86	0	0.4310	5.605	70.2	7.9549	7	330	19.1	18.46
247	0.33983	22.0	5.86	0	0.4310	6.108	34.9	8.0555	7	330	19.1	9.16
248	0.19657	22.0	5.86	0	0.4310	6.226	79.2	8.0555	7	330	19.1	10.15
249	0.16439	22.0	5.86	0	0.4310	6.433	49.1	7.8265	7	330	19.1	9.52
250	0.19073	22.0	5.86	0	0.4310	6.718	17.5	7.8265	7	330	19.1	6.56
251	0.14030	22.0	5.86	0	0.4310	6.487	13.0	7.3967	7	330	19.1	5.90
252	0.21409	22.0	5.86	0	0.4310	6.438	8.9	7.3967	7	330	19.1	3.59
253	0.08221	22.0	5.86	0	0.4310	6.957	6.8	8.9067	7	330	19.1	3.53
254	0.36894	22.0	5.86	0	0.4310	8.259	8.4	8.9067	7	330	19.1	3.54
255	0.04819	80.0	3.64	0	0.3920	6.108	32.0	9.2203	1	315	16.4	6.57
256	0.03548	80.0	3.64	0	0.3920	5.876	19.1	9.2203	1	315	16.4	9.25
257	0.01538	90.0	3.75	0	0.3940	7.454	34.2	6.3361	3	244	15.9	3.11
258	0.61154	20.0	3.97	0	0.6470	8.704	86.9	1.8010	5	264	13.0	5.12
259	0.66351	20.0	3.97	0	0.6470	7.333	100.0	1.8946	5	264	13.0	7.79
260	0.65665	20.0	3.97	0	0.6470	6.842	100.0	2.0107	5	264	13.0	6.90
261	0.54011	20.0	3.97	0	0.6470	7.203	81.8	2.1121	5	264	13.0	9.59
262	0.53412	20.0	3.97	0	0.6470	7.520	89.4	2.1398	5	264	13.0	7.26
263	0.52014	20.0	3.97	0	0.6470	8.398	91.5	2.2885	5	264	13.0	5.91
264	0.82526	20.0	3.97	0	0.6470	7.327	94.5	2.0788	5	264	13.0	11.25
265	0.55007	20.0	3.97	0	0.6470	7.206	91.6	1.9301	5	264	13.0	8.10
266	0.76162	20.0	3.97	0	0.6470	5.560	62.8	1.9865	5	264	13.0	10.45
267	0.78570	20.0	3.97	0	0.6470	7.014	84.6	2.1329	5	264	13.0	14.79
268	0.57834	20.0	3.97	0	0.5750	8.297	67.0	2.4216	5	264	13.0	7.44
269	0.54050	20.0	3.97	0	0.5750	7.470	52.6	2.8720	5	264	13.0	3.16
270	0.09065	20.0	6.96	1	0.4640	5.920	61.5	3.9175	3	223	18.6	13.65
271	0.29916	20.0	6.96	0	0.4640	5.856	42.1	4.4290	3	223	18.6	13.00
272	0.16211	20.0	6.96	0	0.4640	6.240	16.3	4.4290	3	223	18.6	6.59
273	0.11460	20.0	6.96	0	0.4640	6.538	58.7	3.9175	3	223	18.6	7.73
274	0.22188	20.0	6.96	1	0.4640	7.691	51.8	4.3665	3	223	18.6	6.58
275	0.05644	40.0	6.41	1	0.4470	6.758	32.9	4.0776	4	254	17.6	3.53
276	0.09604	40.0	6.41	0	0.4470	6.854	42.8	4.2673	4	254	17.6	2.98
277	0.10469	40.0	6.41	1	0.4470	7.267	49.0	4.7872	4	254	17.6	6.05
278	0.06127	40.0	6.41	1	0.4470	6.826	27.6	4.8628	4	254	17.6	4.16
279	0.07978	40.0	6.41	0	0.4470	6.482	32.1	4.1403	4	254	17.6	7.19
280	0.21038	20.0	3.33	0	0.4429	6.812	32.2	4.1007	5	216	14.9	4.85
281	0.03578	20.0	3.33	0	0.4429	7.820	64.5	4.6947	5	216	14.9	3.76
282	0.03705	20.0	3.33	0	0.4429	6.968	37.2	5.2447	5	216	14.9	4.59
283	0.06129	20.0	3.33	1	0.4429	7.645	49.7	5.2119	5	216	14.9	3.01
284	0.01501	90.0	1.21	1	0.4010	7.923	24.8	5.8850	1	198	13.6	3.16
285	0.00906	90.0	2.97	0	0.4000	7.088	20.8	7.3073	1	285	15.3	7.85
286	0.01096	55.0	2.25	0	0.3890	6.453	31.9	7.3073	1	300	15.3	8.23
287	0.01965	80.0	1.76	0	0.3850	6.230	31.5	9.0892	1	241	18.2	12.93
288	0.03871	52.5	5.32	0	0.4050	6.209	31.3	7.3172	6	293	16.6	7.14

289	0.04590	52.5	5.32	0	0.4050	6.315	45.6	7.3172	6	293	16.6	7.60
290	0.04297	52.5	5.32	0	0.4050	6.565	22.9	7.3172	6	293	16.6	9.51
291	0.03502	80.0	4.95	0	0.4110	6.861	27.9	5.1167	4	245	19.2	3.33
292	0.07886	80.0	4.95	0	0.4110	7.148	27.7	5.1167	4	245	19.2	3.56
293	0.03615	80.0	4.95	0	0.4110	6.630	23.4	5.1167	4	245	19.2	4.70
294	0.08265	0.0	13.92	0	0.4370	6.127	18.4	5.5027	4	289	16.0	8.58
295	0.08199	0.0	13.92	0	0.4370	6.009	42.3	5.5027	4	289	16.0	10.40
296	0.12932	0.0	13.92	0	0.4370	6.678	31.1	5.9604	4	289	16.0	6.27
297	0.05372	0.0	13.92	0	0.4370	6.549	51.0	5.9604	4	289	16.0	7.39
298	0.14103	0.0	13.92	0	0.4370	5.790	58.0	6.3200	4	289	16.0	15.84
299	0.06466	70.0	2.24	0	0.4000	6.345	20.1	7.8278	5	358	14.8	4.97
300	0.05561	70.0	2.24	0	0.4000	7.041	10.0	7.8278	5	358	14.8	4.74
301	0.04417	70.0	2.24	0	0.4000	6.871	47.4	7.8278	5	358	14.8	6.07
302	0.03537	34.0	6.09	0	0.4330	6.590	40.4	5.4917	7	329	16.1	9.50
303	0.09266	34.0	6.09	0	0.4330	6.495	18.4	5.4917	7	329	16.1	8.67
304	0.10000	34.0	6.09	0	0.4330	6.982	17.7	5.4917	7	329	16.1	4.86
305	0.05515	33.0	2.18	0	0.4720	7.236	41.1	4.0220	7	222	18.4	6.93
306	0.05479	33.0	2.18	0	0.4720	6.616	58.1	3.3700	7	222	18.4	8.93
307	0.07503	33.0	2.18	0	0.4720	7.420	71.9	3.0992	7	222	18.4	6.47
308	0.04932	33.0	2.18	0	0.4720	6.849	70.3	3.1827	7	222	18.4	7.53
309	0.49298	0.0	9.90	0	0.5440	6.635	82.5	3.3175	4	304	18.4	4.54
310	0.34940	0.0	9.90	0	0.5440	5.972	76.7	3.1025	4	304	18.4	9.97
311	2.63548	0.0	9.90	0	0.5440	4.973	37.8	2.5194	4	304	18.4	12.64
312	0.79041	0.0	9.90	0	0.5440	6.122	52.8	2.6403	4	304	18.4	5.98
313	0.26169	0.0	9.90	0	0.5440	6.023	90.4	2.8340	4	304	18.4	11.72
314	0.26938	0.0	9.90	0	0.5440	6.266	82.8	3.2628	4	304	18.4	7.90
315	0.36920	0.0	9.90	0	0.5440	6.567	87.3	3.6023	4	304	18.4	9.28
316	0.25356	0.0	9.90	0	0.5440	5.705	77.7	3.9450	4	304	18.4	11.50
317	0.31827	0.0	9.90	0	0.5440	5.914	83.2	3.9986	4	304	18.4	18.33
318	0.24522	0.0	9.90	0	0.5440	5.782	71.7	4.0317	4	304	18.4	15.94
319	0.40202	0.0	9.90	0	0.5440	6.382	67.2	3.5325	4	304	18.4	10.36
320	0.47547	0.0	9.90	0	0.5440	6.113	58.8	4.0019	4	304	18.4	12.73
321	0.16760	0.0	7.38	0	0.4930	6.426	52.3	4.5404	5	287	19.6	7.20
322	0.18159	0.0	7.38	0	0.4930	6.376	54.3	4.5404	5	287	19.6	6.87
323	0.35114	0.0	7.38	0	0.4930	6.041	49.9	4.7211	5	287	19.6	7.70
324	0.28392	0.0	7.38	0	0.4930	5.708	74.3	4.7211	5	287	19.6	11.74
325	0.34109	0.0	7.38	0	0.4930	6.415	40.1	4.7211	5	287	19.6	6.12
326	0.19186	0.0	7.38	0	0.4930	6.431	14.7	5.4159	5	287	19.6	5.08
327	0.30347	0.0	7.38	0	0.4930	6.312	28.9	5.4159	5	287	19.6	6.15
328	0.24103	0.0	7.38	0	0.4930	6.083	43.7	5.4159	5	287	19.6	12.79
329	0.06617	0.0	3.24	0	0.4600	5.868	25.8	5.2146	4	430	16.9	9.97
330	0.06724	0.0	3.24	0	0.4600	6.333	17.2	5.2146	4	430	16.9	7.34
331	0.04544	0.0	3.24	0	0.4600	6.144	32.2	5.8736	4	430	16.9	9.09

332	0.05023	35.0	6.06	0	0.4379	5.706	28.4	6.6407	1	304	16.9	12.43
333	0.03466	35.0	6.06	0	0.4379	6.031	23.3	6.6407	1	304	16.9	7.83
334	0.05083	0.0	5.19	0	0.5150	6.316	38.1	6.4584	5	224	20.2	5.68
335	0.03738	0.0	5.19	0	0.5150	6.310	38.5	6.4584	5	224	20.2	6.75
336	0.03961	0.0	5.19	0	0.5150	6.037	34.5	5.9853	5	224	20.2	8.01
337	0.03427	0.0	5.19	0	0.5150	5.869	46.3	5.2311	5	224	20.2	9.80
338	0.03041	0.0	5.19	0	0.5150	5.895	59.6	5.6150	5	224	20.2	10.56
339	0.03306	0.0	5.19	0	0.5150	6.059	37.3	4.8122	5	224	20.2	8.51
340	0.05497	0.0	5.19	0	0.5150	5.985	45.4	4.8122	5	224	20.2	9.74
341	0.06151	0.0	5.19	0	0.5150	5.968	58.5	4.8122	5	224	20.2	9.29
342	0.01301	35.0	1.52	0	0.4420	7.241	49.3	7.0379	1	284	15.5	5.49
343	0.02498	0.0	1.89	0	0.5180	6.540	59.7	6.2669	1	422	15.9	8.65
344	0.02543	55.0	3.78	0	0.4840	6.696	56.4	5.7321	5	370	17.6	7.18
345	0.03049	55.0	3.78	0	0.4840	6.874	28.1	6.4654	5	370	17.6	4.61
346	0.03113	0.0	4.39	0	0.4420	6.014	48.5	8.0136	3	352	18.8	10.53
347	0.06162	0.0	4.39	0	0.4420	5.898	52.3	8.0136	3	352	18.8	12.67
348	0.01870	85.0	4.15	0	0.4290	6.516	27.7	8.5353	4	351	17.9	6.36
349	0.01501	80.0	2.01	0	0.4350	6.635	29.7	8.3440	4	280	17.0	5.99
350	0.02899	40.0	1.25	0	0.4290	6.939	34.5	8.7921	1	335	19.7	5.89
351	0.06211	40.0	1.25	0	0.4290	6.490	44.4	8.7921	1	335	19.7	5.98
352	0.07950	60.0	1.69	0	0.4110	6.579	35.9	10.7103	4	411	18.3	5.49
353	0.07244	60.0	1.69	0	0.4110	5.884	18.5	10.7103	4	411	18.3	7.79
354	0.01709	90.0	2.02	0	0.4100	6.728	36.1	12.1265	5	187	17.0	4.50
355	0.04301	80.0	1.91	0	0.4130	5.663	21.9	10.5857	4	334	22.0	8.05
356	0.10659	80.0	1.91	0	0.4130	5.936	19.5	10.5857	4	334	22.0	5.57
357	8.98296	0.0	18.10	1	0.7700	6.212	97.4	2.1222	24	666	20.2	17.60
358	3.84970	0.0	18.10	1	0.7700	6.395	91.0	2.5052	24	666	20.2	13.27
359	5.20177	0.0	18.10	1	0.7700	6.127	83.4	2.7227	24	666	20.2	11.48
360	4.26131	0.0	18.10	0	0.7700	6.112	81.3	2.5091	24	666	20.2	12.67
361	4.54192	0.0	18.10	0	0.7700	6.398	88.0	2.5182	24	666	20.2	7.79
362	3.83684	0.0	18.10	0	0.7700	6.251	91.1	2.2955	24	666	20.2	14.19
363	3.67822	0.0	18.10	0	0.7700	5.362	96.2	2.1036	24	666	20.2	10.19
364	4.22239	0.0	18.10	1	0.7700	5.803	89.0	1.9047	24	666	20.2	14.64
365	3.47428	0.0	18.10	1	0.7180	8.780	82.9	1.9047	24	666	20.2	5.29
366	4.55587	0.0	18.10	0	0.7180	3.561	87.9	1.6132	24	666	20.2	7.12
367	3.69695	0.0	18.10	0	0.7180	4.963	91.4	1.7523	24	666	20.2	14.00
368	13.52220	0.0	18.10	0	0.6310	3.863	100.0	1.5106	24	666	20.2	13.33
369	4.89822	0.0	18.10	0	0.6310	4.970	100.0	1.3325	24	666	20.2	3.26
370	5.66998	0.0	18.10	1	0.6310	6.683	96.8	1.3567	24	666	20.2	3.73
371	6.53876	0.0	18.10	1	0.6310	7.016	97.5	1.2024	24	666	20.2	2.96
372	9.23230	0.0	18.10	0	0.6310	6.216	100.0	1.1691	24	666	20.2	9.53
373	8.26725	0.0	18.10	1	0.6680	5.875	89.6	1.1296	24	666	20.2	8.88
374	11.10810	0.0	18.10	0	0.6680	4.906	100.0	1.1742	24	666	20.2	34.77

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375 18.49820   0.0 18.10    0 0.6680 4.138 100.0  1.1370  24 666    20.2 37.97
376 19.60910   0.0 18.10    0 0.6710 7.313  97.9  1.3163  24 666    20.2 13.44
377 15.28800   0.0 18.10    0 0.6710 6.649  93.3  1.3449  24 666    20.2 23.24
378  9.82349   0.0 18.10    0 0.6710 6.794  98.8  1.3580  24 666    20.2 21.24
379 23.64820   0.0 18.10    0 0.6710 6.380  96.2  1.3861  24 666    20.2 23.69
380 17.86670   0.0 18.10    0 0.6710 6.223 100.0  1.3861  24 666    20.2 21.78
381 88.97620   0.0 18.10    0 0.6710 6.968  91.9  1.4165  24 666    20.2 17.21
382 15.87440   0.0 18.10    0 0.6710 6.545  99.1  1.5192  24 666    20.2 21.08
383  9.18702   0.0 18.10    0 0.7000 5.536 100.0  1.5804  24 666    20.2 23.60
384  7.99248   0.0 18.10    0 0.7000 5.520 100.0  1.5331  24 666    20.2 24.56
385 20.08490   0.0 18.10    0 0.7000 4.368  91.2  1.4395  24 666    20.2 30.63
386 16.81180   0.0 18.10    0 0.7000 5.277  98.1  1.4261  24 666    20.2 30.81
387 24.39380   0.0 18.10    0 0.7000 4.652 100.0  1.4672  24 666    20.2 28.28
388 22.59710   0.0 18.10    0 0.7000 5.000  89.5  1.5184  24 666    20.2 31.99
389 14.33370   0.0 18.10    0 0.7000 4.880 100.0  1.5895  24 666    20.2 30.62
390  8.15174   0.0 18.10    0 0.7000 5.390  98.9  1.7281  24 666    20.2 20.85
391  6.96215   0.0 18.10    0 0.7000 5.713  97.0  1.9265  24 666    20.2 17.11
392  5.29305   0.0 18.10    0 0.7000 6.051  82.5  2.1678  24 666    20.2 18.76
393 11.57790   0.0 18.10    0 0.7000 5.036  97.0  1.7700  24 666    20.2 25.68
394  8.64476   0.0 18.10    0 0.6930 6.193  92.6  1.7912  24 666    20.2 15.17
395 13.35980   0.0 18.10    0 0.6930 5.887  94.7  1.7821  24 666    20.2 16.35
396  8.71675   0.0 18.10    0 0.6930 6.471  98.8  1.7257  24 666    20.2 17.12
397  5.87205   0.0 18.10    0 0.6930 6.405  96.0  1.6768  24 666    20.2 19.37
398  7.67202   0.0 18.10    0 0.6930 5.747  98.9  1.6334  24 666    20.2 19.92
399 38.35180   0.0 18.10    0 0.6930 5.453 100.0  1.4896  24 666    20.2 30.59
400  9.91655   0.0 18.10    0 0.6930 5.852  77.8  1.5004  24 666    20.2 29.97
401 25.04610   0.0 18.10    0 0.6930 5.987 100.0  1.5888  24 666    20.2 26.77
402 14.23620   0.0 18.10    0 0.6930 6.343 100.0  1.5741  24 666    20.2 20.32
403  9.59571   0.0 18.10    0 0.6930 6.404 100.0  1.6390  24 666    20.2 20.31
404 24.80170   0.0 18.10    0 0.6930 5.349  96.0  1.7028  24 666    20.2 19.77
405 41.52920   0.0 18.10    0 0.6930 5.531  85.4  1.6074  24 666    20.2 27.38
406 67.92080   0.0 18.10    0 0.6930 5.683 100.0  1.4254  24 666    20.2 22.98
407 20.71620   0.0 18.10    0 0.6590 4.138 100.0  1.1781  24 666    20.2 23.34
408 11.95110   0.0 18.10    0 0.6590 5.608 100.0  1.2852  24 666    20.2 12.13
409  7.40389   0.0 18.10    0 0.5970 5.617  97.9  1.4547  24 666    20.2 26.40
410 14.43830   0.0 18.10    0 0.5970 6.852 100.0  1.4655  24 666    20.2 19.78
411 51.13580   0.0 18.10    0 0.5970 5.757 100.0  1.4130  24 666    20.2 10.11
412 14.05070   0.0 18.10    0 0.5970 6.657 100.0  1.5275  24 666    20.2 21.22
413 18.81100   0.0 18.10    0 0.5970 4.628 100.0  1.5539  24 666    20.2 34.37
414 28.65580   0.0 18.10    0 0.5970 5.155 100.0  1.5894  24 666    20.2 20.08
415 45.74610   0.0 18.10    0 0.6930 4.519 100.0  1.6582  24 666    20.2 36.98
416 18.08460   0.0 18.10    0 0.6790 6.434 100.0  1.8347  24 666    20.2 29.05
417 10.83420   0.0 18.10    0 0.6790 6.782  90.8  1.8195  24 666    20.2 25.79
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418	25.94060	0.0	18.10	0	0.6790	5.304	89.1	1.6475	24	666	20.2	26.64
419	73.53410	0.0	18.10	0	0.6790	5.957	100.0	1.8026	24	666	20.2	20.62
420	11.81230	0.0	18.10	0	0.7180	6.824	76.5	1.7940	24	666	20.2	22.74
421	11.08740	0.0	18.10	0	0.7180	6.411	100.0	1.8589	24	666	20.2	15.02
422	7.02259	0.0	18.10	0	0.7180	6.006	95.3	1.8746	24	666	20.2	15.70
423	12.04820	0.0	18.10	0	0.6140	5.648	87.6	1.9512	24	666	20.2	14.10
424	7.05042	0.0	18.10	0	0.6140	6.103	85.1	2.0218	24	666	20.2	23.29
425	8.79212	0.0	18.10	0	0.5840	5.565	70.6	2.0635	24	666	20.2	17.16
426	15.86030	0.0	18.10	0	0.6790	5.896	95.4	1.9096	24	666	20.2	24.39
427	12.24720	0.0	18.10	0	0.5840	5.837	59.7	1.9976	24	666	20.2	15.69
428	37.66190	0.0	18.10	0	0.6790	6.202	78.7	1.8629	24	666	20.2	14.52
429	7.36711	0.0	18.10	0	0.6790	6.193	78.1	1.9356	24	666	20.2	21.52
430	9.33889	0.0	18.10	0	0.6790	6.380	95.6	1.9682	24	666	20.2	24.08
431	8.49213	0.0	18.10	0	0.5840	6.348	86.1	2.0527	24	666	20.2	17.64
432	10.06230	0.0	18.10	0	0.5840	6.833	94.3	2.0882	24	666	20.2	19.69
433	6.44405	0.0	18.10	0	0.5840	6.425	74.8	2.2004	24	666	20.2	12.03
434	5.58107	0.0	18.10	0	0.7130	6.436	87.9	2.3158	24	666	20.2	16.22
435	13.91340	0.0	18.10	0	0.7130	6.208	95.0	2.2222	24	666	20.2	15.17
436	11.16040	0.0	18.10	0	0.7400	6.629	94.6	2.1247	24	666	20.2	23.27
437	14.42080	0.0	18.10	0	0.7400	6.461	93.3	2.0026	24	666	20.2	18.05
438	15.17720	0.0	18.10	0	0.7400	6.152	100.0	1.9142	24	666	20.2	26.45
439	13.67810	0.0	18.10	0	0.7400	5.935	87.9	1.8206	24	666	20.2	34.02
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441	22.05110	0.0	18.10	0	0.7400	5.818	92.4	1.8662	24	666	20.2	22.11
442	9.72418	0.0	18.10	0	0.7400	6.406	97.2	2.0651	24	666	20.2	19.52
443	5.66637	0.0	18.10	0	0.7400	6.219	100.0	2.0048	24	666	20.2	16.59
444	9.96654	0.0	18.10	0	0.7400	6.485	100.0	1.9784	24	666	20.2	18.85
445	12.80230	0.0	18.10	0	0.7400	5.854	96.6	1.8956	24	666	20.2	23.79
446	10.67180	0.0	18.10	0	0.7400	6.459	94.8	1.9879	24	666	20.2	23.98
447	6.28807	0.0	18.10	0	0.7400	6.341	96.4	2.0720	24	666	20.2	17.79
448	9.92485	0.0	18.10	0	0.7400	6.251	96.6	2.1980	24	666	20.2	16.44
449	9.32909	0.0	18.10	0	0.7130	6.185	98.7	2.2616	24	666	20.2	18.13
450	7.52601	0.0	18.10	0	0.7130	6.417	98.3	2.1850	24	666	20.2	19.31
451	6.71772	0.0	18.10	0	0.7130	6.749	92.6	2.3236	24	666	20.2	17.44
452	5.44114	0.0	18.10	0	0.7130	6.655	98.2	2.3552	24	666	20.2	17.73
453	5.09017	0.0	18.10	0	0.7130	6.297	91.8	2.3682	24	666	20.2	17.27
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455	9.51363	0.0	18.10	0	0.7130	6.728	94.1	2.4961	24	666	20.2	18.71
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457	4.66883	0.0	18.10	0	0.7130	5.976	87.9	2.5806	24	666	20.2	19.01
458	8.20058	0.0	18.10	0	0.7130	5.936	80.3	2.7792	24	666	20.2	16.94
459	7.75223	0.0	18.10	0	0.7130	6.301	83.7	2.7831	24	666	20.2	16.23
460	6.80117	0.0	18.10	0	0.7130	6.081	84.4	2.7175	24	666	20.2	14.70

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462	3.69311	0.0	18.10	0	0.7130	6.376	88.4	2.5671	24	666	20.2	14.65
463	6.65492	0.0	18.10	0	0.7130	6.317	83.0	2.7344	24	666	20.2	13.99
464	5.82115	0.0	18.10	0	0.7130	6.513	89.9	2.8016	24	666	20.2	10.29
465	7.83932	0.0	18.10	0	0.6550	6.209	65.4	2.9634	24	666	20.2	13.22
466	3.16360	0.0	18.10	0	0.6550	5.759	48.2	3.0665	24	666	20.2	14.13
467	3.77498	0.0	18.10	0	0.6550	5.952	84.7	2.8715	24	666	20.2	17.15
468	4.42228	0.0	18.10	0	0.5840	6.003	94.5	2.5403	24	666	20.2	21.32
469	15.57570	0.0	18.10	0	0.5800	5.926	71.0	2.9084	24	666	20.2	18.13
470	13.07510	0.0	18.10	0	0.5800	5.713	56.7	2.8237	24	666	20.2	14.76
471	4.34879	0.0	18.10	0	0.5800	6.167	84.0	3.0334	24	666	20.2	16.29
472	4.03841	0.0	18.10	0	0.5320	6.229	90.7	3.0993	24	666	20.2	12.87
473	3.56868	0.0	18.10	0	0.5800	6.437	75.0	2.8965	24	666	20.2	14.36
474	4.64689	0.0	18.10	0	0.6140	6.980	67.6	2.5329	24	666	20.2	11.66
475	8.05579	0.0	18.10	0	0.5840	5.427	95.4	2.4298	24	666	20.2	18.14
476	6.39312	0.0	18.10	0	0.5840	6.162	97.4	2.2060	24	666	20.2	24.10
477	4.87141	0.0	18.10	0	0.6140	6.484	93.6	2.3053	24	666	20.2	18.68
478	15.02340	0.0	18.10	0	0.6140	5.304	97.3	2.1007	24	666	20.2	24.91
479	10.23300	0.0	18.10	0	0.6140	6.185	96.7	2.1705	24	666	20.2	18.03
480	14.33370	0.0	18.10	0	0.6140	6.229	88.0	1.9512	24	666	20.2	13.11
481	5.82401	0.0	18.10	0	0.5320	6.242	64.7	3.4242	24	666	20.2	10.74
482	5.70818	0.0	18.10	0	0.5320	6.750	74.9	3.3317	24	666	20.2	7.74
483	5.73116	0.0	18.10	0	0.5320	7.061	77.0	3.4106	24	666	20.2	7.01
484	2.81838	0.0	18.10	0	0.5320	5.762	40.3	4.0983	24	666	20.2	10.42
485	2.37857	0.0	18.10	0	0.5830	5.871	41.9	3.7240	24	666	20.2	13.34
486	3.67367	0.0	18.10	0	0.5830	6.312	51.9	3.9917	24	666	20.2	10.58
487	5.69175	0.0	18.10	0	0.5830	6.114	79.8	3.5459	24	666	20.2	14.98
488	4.83567	0.0	18.10	0	0.5830	5.905	53.2	3.1523	24	666	20.2	11.45
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490	0.18337	0.0	27.74	0	0.6090	5.414	98.3	1.7554	4	711	20.1	23.97
491	0.20746	0.0	27.74	0	0.6090	5.093	98.0	1.8226	4	711	20.1	29.68
492	0.10574	0.0	27.74	0	0.6090	5.983	98.8	1.8681	4	711	20.1	18.07
493	0.11132	0.0	27.74	0	0.6090	5.983	83.5	2.1099	4	711	20.1	13.35
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495	0.27957	0.0	9.69	0	0.5850	5.926	42.6	2.3817	6	391	19.2	13.59
496	0.17899	0.0	9.69	0	0.5850	5.670	28.8	2.7986	6	391	19.2	17.60
497	0.28960	0.0	9.69	0	0.5850	5.390	72.9	2.7986	6	391	19.2	21.14
498	0.26838	0.0	9.69	0	0.5850	5.794	70.6	2.8927	6	391	19.2	14.10
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500	0.17783	0.0	9.69	0	0.5850	5.569	73.5	2.3999	6	391	19.2	15.10
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503	0.04527	0.0	11.93	0	0.5730	6.120	76.7	2.2875	1	273	21.0	9.08

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492 13.6
493 20.1
494 21.8
495 24.5
496 23.1
497 19.7
498 18.3
499 21.2
500 17.5
501 16.8
502 22.4
503 20.6
504 23.9
505 22.0
506 11.9


[[2]]
[[2]]$train
        crim    zn indus chas    nox    rm   age     dis rad tax ptratio lstat
1    0.00632  18.0  2.31    0 0.5380 6.575  65.2  4.0900   1 296    15.3  4.98
```

2	0.02731	0.0	7.07	0	0.4690	6.421	78.9	4.9671	2	242	17.8	9.14
3	0.02729	0.0	7.07	0	0.4690	7.185	61.1	4.9671	2	242	17.8	4.03
4	0.03237	0.0	2.18	0	0.4580	6.998	45.8	6.0622	3	222	18.7	2.94
5	0.06905	0.0	2.18	0	0.4580	7.147	54.2	6.0622	3	222	18.7	5.33
6	0.02985	0.0	2.18	0	0.4580	6.430	58.7	6.0622	3	222	18.7	5.21
7	0.08829	12.5	7.87	0	0.5240	6.012	66.6	5.5605	5	311	15.2	12.43
8	0.14455	12.5	7.87	0	0.5240	6.172	96.1	5.9505	5	311	15.2	19.15
9	0.21124	12.5	7.87	0	0.5240	5.631	100.0	6.0821	5	311	15.2	29.93
10	0.17004	12.5	7.87	0	0.5240	6.004	85.9	6.5921	5	311	15.2	17.10
11	0.22489	12.5	7.87	0	0.5240	6.377	94.3	6.3467	5	311	15.2	20.45
12	0.11747	12.5	7.87	0	0.5240	6.009	82.9	6.2267	5	311	15.2	13.27
13	0.09378	12.5	7.87	0	0.5240	5.889	39.0	5.4509	5	311	15.2	15.71
14	0.62976	0.0	8.14	0	0.5380	5.949	61.8	4.7075	4	307	21.0	8.26
15	0.63796	0.0	8.14	0	0.5380	6.096	84.5	4.4619	4	307	21.0	10.26
16	0.62739	0.0	8.14	0	0.5380	5.834	56.5	4.4986	4	307	21.0	8.47
17	1.05393	0.0	8.14	0	0.5380	5.935	29.3	4.4986	4	307	21.0	6.58
18	0.78420	0.0	8.14	0	0.5380	5.990	81.7	4.2579	4	307	21.0	14.67
19	0.80271	0.0	8.14	0	0.5380	5.456	36.6	3.7965	4	307	21.0	11.69
20	0.72580	0.0	8.14	0	0.5380	5.727	69.5	3.7965	4	307	21.0	11.28
21	1.25179	0.0	8.14	0	0.5380	5.570	98.1	3.7979	4	307	21.0	21.02
22	0.85204	0.0	8.14	0	0.5380	5.965	89.2	4.0123	4	307	21.0	13.83
23	1.23247	0.0	8.14	0	0.5380	6.142	91.7	3.9769	4	307	21.0	18.72
24	0.98843	0.0	8.14	0	0.5380	5.813	100.0	4.0952	4	307	21.0	19.88
25	0.75026	0.0	8.14	0	0.5380	5.924	94.1	4.3996	4	307	21.0	16.30
26	0.84054	0.0	8.14	0	0.5380	5.599	85.7	4.4546	4	307	21.0	16.51
27	0.67191	0.0	8.14	0	0.5380	5.813	90.3	4.6820	4	307	21.0	14.81
28	0.95577	0.0	8.14	0	0.5380	6.047	88.8	4.4534	4	307	21.0	17.28
29	0.77299	0.0	8.14	0	0.5380	6.495	94.4	4.4547	4	307	21.0	12.80
30	1.00245	0.0	8.14	0	0.5380	6.674	87.3	4.2390	4	307	21.0	11.98
31	1.13081	0.0	8.14	0	0.5380	5.713	94.1	4.2330	4	307	21.0	22.60
32	1.35472	0.0	8.14	0	0.5380	6.072	100.0	4.1750	4	307	21.0	13.04
33	1.38799	0.0	8.14	0	0.5380	5.950	82.0	3.9900	4	307	21.0	27.71
34	1.15172	0.0	8.14	0	0.5380	5.701	95.0	3.7872	4	307	21.0	18.35
35	1.61282	0.0	8.14	0	0.5380	6.096	96.9	3.7598	4	307	21.0	20.34
36	0.06417	0.0	5.96	0	0.4990	5.933	68.2	3.3603	5	279	19.2	9.68
37	0.09744	0.0	5.96	0	0.4990	5.841	61.4	3.3779	5	279	19.2	11.41
38	0.08014	0.0	5.96	0	0.4990	5.850	41.5	3.9342	5	279	19.2	8.77
39	0.17505	0.0	5.96	0	0.4990	5.966	30.2	3.8473	5	279	19.2	10.13
40	0.02763	75.0	2.95	0	0.4280	6.595	21.8	5.4011	3	252	18.3	4.32
41	0.03359	75.0	2.95	0	0.4280	7.024	15.8	5.4011	3	252	18.3	1.98
42	0.12744	0.0	6.91	0	0.4480	6.770	2.9	5.7209	3	233	17.9	4.84
43	0.14150	0.0	6.91	0	0.4480	6.169	6.6	5.7209	3	233	17.9	5.81
44	0.15936	0.0	6.91	0	0.4480	6.211	6.5	5.7209	3	233	17.9	7.44

45	0.12269	0.0	6.91	0	0.4480	6.069	40.0	5.7209	3	233	17.9	9.55
46	0.17142	0.0	6.91	0	0.4480	5.682	33.8	5.1004	3	233	17.9	10.21
47	0.18836	0.0	6.91	0	0.4480	5.786	33.3	5.1004	3	233	17.9	14.15
48	0.22927	0.0	6.91	0	0.4480	6.030	85.5	5.6894	3	233	17.9	18.80
49	0.25387	0.0	6.91	0	0.4480	5.399	95.3	5.8700	3	233	17.9	30.81
50	0.21977	0.0	6.91	0	0.4480	5.602	62.0	6.0877	3	233	17.9	16.20
51	0.08873	21.0	5.64	0	0.4390	5.963	45.7	6.8147	4	243	16.8	13.45
52	0.04337	21.0	5.64	0	0.4390	6.115	63.0	6.8147	4	243	16.8	9.43
53	0.05360	21.0	5.64	0	0.4390	6.511	21.1	6.8147	4	243	16.8	5.28
54	0.04981	21.0	5.64	0	0.4390	5.998	21.4	6.8147	4	243	16.8	8.43
55	0.01360	75.0	4.00	0	0.4100	5.888	47.6	7.3197	3	469	21.1	14.80
56	0.01311	90.0	1.22	0	0.4030	7.249	21.9	8.6966	5	226	17.9	4.81
57	0.02055	85.0	0.74	0	0.4100	6.383	35.7	9.1876	2	313	17.3	5.77
58	0.01432	100.0	1.32	0	0.4110	6.816	40.5	8.3248	5	256	15.1	3.95
59	0.15445	25.0	5.13	0	0.4530	6.145	29.2	7.8148	8	284	19.7	6.86
60	0.10328	25.0	5.13	0	0.4530	5.927	47.2	6.9320	8	284	19.7	9.22
61	0.14932	25.0	5.13	0	0.4530	5.741	66.2	7.2254	8	284	19.7	13.15
62	0.17171	25.0	5.13	0	0.4530	5.966	93.4	6.8185	8	284	19.7	14.44
63	0.11027	25.0	5.13	0	0.4530	6.456	67.8	7.2255	8	284	19.7	6.73
64	0.12650	25.0	5.13	0	0.4530	6.762	43.4	7.9809	8	284	19.7	9.50
65	0.01951	17.5	1.38	0	0.4161	7.104	59.5	9.2229	3	216	18.6	8.05
66	0.03584	80.0	3.37	0	0.3980	6.290	17.8	6.6115	4	337	16.1	4.67
67	0.04379	80.0	3.37	0	0.3980	5.787	31.1	6.6115	4	337	16.1	10.24
68	0.05789	12.5	6.07	0	0.4090	5.878	21.4	6.4980	4	345	18.9	8.10
69	0.13554	12.5	6.07	0	0.4090	5.594	36.8	6.4980	4	345	18.9	13.09
70	0.12816	12.5	6.07	0	0.4090	5.885	33.0	6.4980	4	345	18.9	8.79
71	0.08826	0.0	10.81	0	0.4130	6.417	6.6	5.2873	4	305	19.2	6.72
72	0.15876	0.0	10.81	0	0.4130	5.961	17.5	5.2873	4	305	19.2	9.88
73	0.09164	0.0	10.81	0	0.4130	6.065	7.8	5.2873	4	305	19.2	5.52
74	0.19539	0.0	10.81	0	0.4130	6.245	6.2	5.2873	4	305	19.2	7.54
75	0.07896	0.0	12.83	0	0.4370	6.273	6.0	4.2515	5	398	18.7	6.78
76	0.09512	0.0	12.83	0	0.4370	6.286	45.0	4.5026	5	398	18.7	8.94
77	0.10153	0.0	12.83	0	0.4370	6.279	74.5	4.0522	5	398	18.7	11.97
78	0.08707	0.0	12.83	0	0.4370	6.140	45.8	4.0905	5	398	18.7	10.27
79	0.05646	0.0	12.83	0	0.4370	6.232	53.7	5.0141	5	398	18.7	12.34
80	0.08387	0.0	12.83	0	0.4370	5.874	36.6	4.5026	5	398	18.7	9.10
81	0.04113	25.0	4.86	0	0.4260	6.727	33.5	5.4007	4	281	19.0	5.29
82	0.04462	25.0	4.86	0	0.4260	6.619	70.4	5.4007	4	281	19.0	7.22
83	0.03659	25.0	4.86	0	0.4260	6.302	32.2	5.4007	4	281	19.0	6.72
84	0.03551	25.0	4.86	0	0.4260	6.167	46.7	5.4007	4	281	19.0	7.51
85	0.05059	0.0	4.49	0	0.4490	6.389	48.0	4.7794	3	247	18.5	9.62
86	0.05735	0.0	4.49	0	0.4490	6.630	56.1	4.4377	3	247	18.5	6.53
87	0.05188	0.0	4.49	0	0.4490	6.015	45.1	4.4272	3	247	18.5	12.86

88	0.07151	0.0	4.49	0	0.4490	6.121	56.8	3.7476	3	247	18.5	8.44
89	0.05660	0.0	3.41	0	0.4890	7.007	86.3	3.4217	2	270	17.8	5.50
90	0.05302	0.0	3.41	0	0.4890	7.079	63.1	3.4145	2	270	17.8	5.70
91	0.04684	0.0	3.41	0	0.4890	6.417	66.1	3.0923	2	270	17.8	8.81
92	0.03932	0.0	3.41	0	0.4890	6.405	73.9	3.0921	2	270	17.8	8.20
93	0.04203	28.0	15.04	0	0.4640	6.442	53.6	3.6659	4	270	18.2	8.16
94	0.02875	28.0	15.04	0	0.4640	6.211	28.9	3.6659	4	270	18.2	6.21
95	0.04294	28.0	15.04	0	0.4640	6.249	77.3	3.6150	4	270	18.2	10.59
96	0.12204	0.0	2.89	0	0.4450	6.625	57.8	3.4952	2	276	18.0	6.65
97	0.11504	0.0	2.89	0	0.4450	6.163	69.6	3.4952	2	276	18.0	11.34
98	0.12083	0.0	2.89	0	0.4450	8.069	76.0	3.4952	2	276	18.0	4.21
99	0.08187	0.0	2.89	0	0.4450	7.820	36.9	3.4952	2	276	18.0	3.57
100	0.06860	0.0	2.89	0	0.4450	7.416	62.5	3.4952	2	276	18.0	6.19
101	0.14866	0.0	8.56	0	0.5200	6.727	79.9	2.7778	5	384	20.9	9.42
102	0.11432	0.0	8.56	0	0.5200	6.781	71.3	2.8561	5	384	20.9	7.67
103	0.22876	0.0	8.56	0	0.5200	6.405	85.4	2.7147	5	384	20.9	10.63
104	0.21161	0.0	8.56	0	0.5200	6.137	87.4	2.7147	5	384	20.9	13.44
105	0.13960	0.0	8.56	0	0.5200	6.167	90.0	2.4210	5	384	20.9	12.33
106	0.13262	0.0	8.56	0	0.5200	5.851	96.7	2.1069	5	384	20.9	16.47
107	0.17120	0.0	8.56	0	0.5200	5.836	91.9	2.2110	5	384	20.9	18.66
108	0.13117	0.0	8.56	0	0.5200	6.127	85.2	2.1224	5	384	20.9	14.09
109	0.12802	0.0	8.56	0	0.5200	6.474	97.1	2.4329	5	384	20.9	12.27
110	0.26363	0.0	8.56	0	0.5200	6.229	91.2	2.5451	5	384	20.9	15.55
111	0.10793	0.0	8.56	0	0.5200	6.195	54.4	2.7778	5	384	20.9	13.00
112	0.10084	0.0	10.01	0	0.5470	6.715	81.6	2.6775	6	432	17.8	10.16
113	0.12329	0.0	10.01	0	0.5470	5.913	92.9	2.3534	6	432	17.8	16.21
114	0.22212	0.0	10.01	0	0.5470	6.092	95.4	2.5480	6	432	17.8	17.09
115	0.14231	0.0	10.01	0	0.5470	6.254	84.2	2.2565	6	432	17.8	10.45
116	0.17134	0.0	10.01	0	0.5470	5.928	88.2	2.4631	6	432	17.8	15.76
117	0.13158	0.0	10.01	0	0.5470	6.176	72.5	2.7301	6	432	17.8	12.04
118	0.15098	0.0	10.01	0	0.5470	6.021	82.6	2.7474	6	432	17.8	10.30
119	0.13058	0.0	10.01	0	0.5470	5.872	73.1	2.4775	6	432	17.8	15.37
120	0.14476	0.0	10.01	0	0.5470	5.731	65.2	2.7592	6	432	17.8	13.61
121	0.06899	0.0	25.65	0	0.5810	5.870	69.7	2.2577	2	188	19.1	14.37
122	0.07165	0.0	25.65	0	0.5810	6.004	84.1	2.1974	2	188	19.1	14.27
123	0.09299	0.0	25.65	0	0.5810	5.961	92.9	2.0869	2	188	19.1	17.93
124	0.15038	0.0	25.65	0	0.5810	5.856	97.0	1.9444	2	188	19.1	25.41
125	0.09849	0.0	25.65	0	0.5810	5.879	95.8	2.0063	2	188	19.1	17.58
126	0.16902	0.0	25.65	0	0.5810	5.986	88.4	1.9929	2	188	19.1	14.81
127	0.38735	0.0	25.65	0	0.5810	5.613	95.6	1.7572	2	188	19.1	27.26
128	0.25915	0.0	21.89	0	0.6240	5.693	96.0	1.7883	4	437	21.2	17.19
129	0.32543	0.0	21.89	0	0.6240	6.431	98.8	1.8125	4	437	21.2	15.39
130	0.88125	0.0	21.89	0	0.6240	5.637	94.7	1.9799	4	437	21.2	18.34

131	0.34006	0.0	21.89	0	0.6240	6.458	98.9	2.1185	4	437	21.2	12.60
132	1.19294	0.0	21.89	0	0.6240	6.326	97.7	2.2710	4	437	21.2	12.26
133	0.59005	0.0	21.89	0	0.6240	6.372	97.9	2.3274	4	437	21.2	11.12
134	0.32982	0.0	21.89	0	0.6240	5.822	95.4	2.4699	4	437	21.2	15.03
135	0.97617	0.0	21.89	0	0.6240	5.757	98.4	2.3460	4	437	21.2	17.31
136	0.55778	0.0	21.89	0	0.6240	6.335	98.2	2.1107	4	437	21.2	16.96
137	0.32264	0.0	21.89	0	0.6240	5.942	93.5	1.9669	4	437	21.2	16.90
138	0.35233	0.0	21.89	0	0.6240	6.454	98.4	1.8498	4	437	21.2	14.59
139	0.24980	0.0	21.89	0	0.6240	5.857	98.2	1.6686	4	437	21.2	21.32
140	0.54452	0.0	21.89	0	0.6240	6.151	97.9	1.6687	4	437	21.2	18.46
141	0.29090	0.0	21.89	0	0.6240	6.174	93.6	1.6119	4	437	21.2	24.16
142	1.62864	0.0	21.89	0	0.6240	5.019	100.0	1.4394	4	437	21.2	34.41
143	3.32105	0.0	19.58	1	0.8710	5.403	100.0	1.3216	5	403	14.7	26.82
144	4.09740	0.0	19.58	0	0.8710	5.468	100.0	1.4118	5	403	14.7	26.42
145	2.77974	0.0	19.58	0	0.8710	4.903	97.8	1.3459	5	403	14.7	29.29
146	2.37934	0.0	19.58	0	0.8710	6.130	100.0	1.4191	5	403	14.7	27.80
147	2.15505	0.0	19.58	0	0.8710	5.628	100.0	1.5166	5	403	14.7	16.65
148	2.36862	0.0	19.58	0	0.8710	4.926	95.7	1.4608	5	403	14.7	29.53
149	2.33099	0.0	19.58	0	0.8710	5.186	93.8	1.5296	5	403	14.7	28.32
150	2.73397	0.0	19.58	0	0.8710	5.597	94.9	1.5257	5	403	14.7	21.45
151	1.65660	0.0	19.58	0	0.8710	6.122	97.3	1.6180	5	403	14.7	14.10
152	1.49632	0.0	19.58	0	0.8710	5.404	100.0	1.5916	5	403	14.7	13.28
153	1.12658	0.0	19.58	1	0.8710	5.012	88.0	1.6102	5	403	14.7	12.12
154	2.14918	0.0	19.58	0	0.8710	5.709	98.5	1.6232	5	403	14.7	15.79
155	1.41385	0.0	19.58	1	0.8710	6.129	96.0	1.7494	5	403	14.7	15.12
156	3.53501	0.0	19.58	1	0.8710	6.152	82.6	1.7455	5	403	14.7	15.02
157	2.44668	0.0	19.58	0	0.8710	5.272	94.0	1.7364	5	403	14.7	16.14
158	1.22358	0.0	19.58	0	0.6050	6.943	97.4	1.8773	5	403	14.7	4.59
159	1.34284	0.0	19.58	0	0.6050	6.066	100.0	1.7573	5	403	14.7	6.43
160	1.42502	0.0	19.58	0	0.8710	6.510	100.0	1.7659	5	403	14.7	7.39
161	1.27346	0.0	19.58	1	0.6050	6.250	92.6	1.7984	5	403	14.7	5.50
162	1.46336	0.0	19.58	0	0.6050	7.489	90.8	1.9709	5	403	14.7	1.73
163	1.83377	0.0	19.58	1	0.6050	7.802	98.2	2.0407	5	403	14.7	1.92
164	1.51902	0.0	19.58	1	0.6050	8.375	93.9	2.1620	5	403	14.7	3.32
165	2.24236	0.0	19.58	0	0.6050	5.854	91.8	2.4220	5	403	14.7	11.64
166	2.92400	0.0	19.58	0	0.6050	6.101	93.0	2.2834	5	403	14.7	9.81
167	2.01019	0.0	19.58	0	0.6050	7.929	96.2	2.0459	5	403	14.7	3.70
168	1.80028	0.0	19.58	0	0.6050	5.877	79.2	2.4259	5	403	14.7	12.14
169	2.30040	0.0	19.58	0	0.6050	6.319	96.1	2.1000	5	403	14.7	11.10
170	2.44953	0.0	19.58	0	0.6050	6.402	95.2	2.2625	5	403	14.7	11.32
171	1.20742	0.0	19.58	0	0.6050	5.875	94.6	2.4259	5	403	14.7	14.43
172	2.31390	0.0	19.58	0	0.6050	5.880	97.3	2.3887	5	403	14.7	12.03
173	0.13914	0.0	4.05	0	0.5100	5.572	88.5	2.5961	5	296	16.6	14.69

174	0.09178	0.0	4.05	0	0.5100	6.416	84.1	2.6463	5	296	16.6	9.04
175	0.08447	0.0	4.05	0	0.5100	5.859	68.7	2.7019	5	296	16.6	9.64
176	0.06664	0.0	4.05	0	0.5100	6.546	33.1	3.1323	5	296	16.6	5.33
177	0.07022	0.0	4.05	0	0.5100	6.020	47.2	3.5549	5	296	16.6	10.11
178	0.05425	0.0	4.05	0	0.5100	6.315	73.4	3.3175	5	296	16.6	6.29
179	0.06642	0.0	4.05	0	0.5100	6.860	74.4	2.9153	5	296	16.6	6.92
180	0.05780	0.0	2.46	0	0.4880	6.980	58.4	2.8290	3	193	17.8	5.04
181	0.06588	0.0	2.46	0	0.4880	7.765	83.3	2.7410	3	193	17.8	7.56
182	0.06888	0.0	2.46	0	0.4880	6.144	62.2	2.5979	3	193	17.8	9.45
183	0.09103	0.0	2.46	0	0.4880	7.155	92.2	2.7006	3	193	17.8	4.82
184	0.10008	0.0	2.46	0	0.4880	6.563	95.6	2.8470	3	193	17.8	5.68
185	0.08308	0.0	2.46	0	0.4880	5.604	89.8	2.9879	3	193	17.8	13.98
186	0.06047	0.0	2.46	0	0.4880	6.153	68.8	3.2797	3	193	17.8	13.15
187	0.05602	0.0	2.46	0	0.4880	7.831	53.6	3.1992	3	193	17.8	4.45
188	0.07875	45.0	3.44	0	0.4370	6.782	41.1	3.7886	5	398	15.2	6.68
189	0.12579	45.0	3.44	0	0.4370	6.556	29.1	4.5667	5	398	15.2	4.56
190	0.08370	45.0	3.44	0	0.4370	7.185	38.9	4.5667	5	398	15.2	5.39
191	0.09068	45.0	3.44	0	0.4370	6.951	21.5	6.4798	5	398	15.2	5.10
192	0.06911	45.0	3.44	0	0.4370	6.739	30.8	6.4798	5	398	15.2	4.69
193	0.08664	45.0	3.44	0	0.4370	7.178	26.3	6.4798	5	398	15.2	2.87
194	0.02187	60.0	2.93	0	0.4010	6.800	9.9	6.2196	1	265	15.6	5.03
195	0.01439	60.0	2.93	0	0.4010	6.604	18.8	6.2196	1	265	15.6	4.38
196	0.01381	80.0	0.46	0	0.4220	7.875	32.0	5.6484	4	255	14.4	2.97
197	0.04011	80.0	1.52	0	0.4040	7.287	34.1	7.3090	2	329	12.6	4.08
198	0.04666	80.0	1.52	0	0.4040	7.107	36.6	7.3090	2	329	12.6	8.61
199	0.03768	80.0	1.52	0	0.4040	7.274	38.3	7.3090	2	329	12.6	6.62
200	0.03150	95.0	1.47	0	0.4030	6.975	15.3	7.6534	3	402	17.0	4.56
201	0.01778	95.0	1.47	0	0.4030	7.135	13.9	7.6534	3	402	17.0	4.45
202	0.03445	82.5	2.03	0	0.4150	6.162	38.4	6.2700	2	348	14.7	7.43
203	0.02177	82.5	2.03	0	0.4150	7.610	15.7	6.2700	2	348	14.7	3.11
204	0.03510	95.0	2.68	0	0.4161	7.853	33.2	5.1180	4	224	14.7	3.81
205	0.02009	95.0	2.68	0	0.4161	8.034	31.9	5.1180	4	224	14.7	2.88
206	0.13642	0.0	10.59	0	0.4890	5.891	22.3	3.9454	4	277	18.6	10.87
207	0.22969	0.0	10.59	0	0.4890	6.326	52.5	4.3549	4	277	18.6	10.97
208	0.25199	0.0	10.59	0	0.4890	5.783	72.7	4.3549	4	277	18.6	18.06
209	0.13587	0.0	10.59	1	0.4890	6.064	59.1	4.2392	4	277	18.6	14.66
210	0.43571	0.0	10.59	1	0.4890	5.344	100.0	3.8750	4	277	18.6	23.09
211	0.17446	0.0	10.59	1	0.4890	5.960	92.1	3.8771	4	277	18.6	17.27
212	0.37578	0.0	10.59	1	0.4890	5.404	88.6	3.6650	4	277	18.6	23.98
213	0.21719	0.0	10.59	1	0.4890	5.807	53.8	3.6526	4	277	18.6	16.03
214	0.14052	0.0	10.59	0	0.4890	6.375	32.3	3.9454	4	277	18.6	9.38
215	0.28955	0.0	10.59	0	0.4890	5.412	9.8	3.5875	4	277	18.6	29.55
216	0.19802	0.0	10.59	0	0.4890	6.182	42.4	3.9454	4	277	18.6	9.47

217	0.04560	0.0	13.89	1	0.5500	5.888	56.0	3.1121	5	276	16.4	13.51
218	0.07013	0.0	13.89	0	0.5500	6.642	85.1	3.4211	5	276	16.4	9.69
219	0.11069	0.0	13.89	1	0.5500	5.951	93.8	2.8893	5	276	16.4	17.92
220	0.11425	0.0	13.89	1	0.5500	6.373	92.4	3.3633	5	276	16.4	10.50
221	0.35809	0.0	6.20	1	0.5070	6.951	88.5	2.8617	8	307	17.4	9.71
222	0.40771	0.0	6.20	1	0.5070	6.164	91.3	3.0480	8	307	17.4	21.46
223	0.62356	0.0	6.20	1	0.5070	6.879	77.7	3.2721	8	307	17.4	9.93
224	0.61470	0.0	6.20	0	0.5070	6.618	80.8	3.2721	8	307	17.4	7.60
225	0.31533	0.0	6.20	0	0.5040	8.266	78.3	2.8944	8	307	17.4	4.14
226	0.52693	0.0	6.20	0	0.5040	8.725	83.0	2.8944	8	307	17.4	4.63
227	0.38214	0.0	6.20	0	0.5040	8.040	86.5	3.2157	8	307	17.4	3.13
228	0.41238	0.0	6.20	0	0.5040	7.163	79.9	3.2157	8	307	17.4	6.36
229	0.29819	0.0	6.20	0	0.5040	7.686	17.0	3.3751	8	307	17.4	3.92
230	0.44178	0.0	6.20	0	0.5040	6.552	21.4	3.3751	8	307	17.4	3.76
231	0.53700	0.0	6.20	0	0.5040	5.981	68.1	3.6715	8	307	17.4	11.65
232	0.46296	0.0	6.20	0	0.5040	7.412	76.9	3.6715	8	307	17.4	5.25
233	0.57529	0.0	6.20	0	0.5070	8.337	73.3	3.8384	8	307	17.4	2.47
234	0.33147	0.0	6.20	0	0.5070	8.247	70.4	3.6519	8	307	17.4	3.95
235	0.44791	0.0	6.20	1	0.5070	6.726	66.5	3.6519	8	307	17.4	8.05
236	0.33045	0.0	6.20	0	0.5070	6.086	61.5	3.6519	8	307	17.4	10.88
237	0.52058	0.0	6.20	1	0.5070	6.631	76.5	4.1480	8	307	17.4	9.54
238	0.51183	0.0	6.20	0	0.5070	7.358	71.6	4.1480	8	307	17.4	4.73
239	0.08244	30.0	4.93	0	0.4280	6.481	18.5	6.1899	6	300	16.6	6.36
240	0.09252	30.0	4.93	0	0.4280	6.606	42.2	6.1899	6	300	16.6	7.37
241	0.11329	30.0	4.93	0	0.4280	6.897	54.3	6.3361	6	300	16.6	11.38
242	0.10612	30.0	4.93	0	0.4280	6.095	65.1	6.3361	6	300	16.6	12.40
243	0.10290	30.0	4.93	0	0.4280	6.358	52.9	7.0355	6	300	16.6	11.22
244	0.12757	30.0	4.93	0	0.4280	6.393	7.8	7.0355	6	300	16.6	5.19
245	0.20608	22.0	5.86	0	0.4310	5.593	76.5	7.9549	7	330	19.1	12.50
246	0.19133	22.0	5.86	0	0.4310	5.605	70.2	7.9549	7	330	19.1	18.46
247	0.33983	22.0	5.86	0	0.4310	6.108	34.9	8.0555	7	330	19.1	9.16
248	0.19657	22.0	5.86	0	0.4310	6.226	79.2	8.0555	7	330	19.1	10.15
249	0.16439	22.0	5.86	0	0.4310	6.433	49.1	7.8265	7	330	19.1	9.52
250	0.19073	22.0	5.86	0	0.4310	6.718	17.5	7.8265	7	330	19.1	6.56
251	0.14030	22.0	5.86	0	0.4310	6.487	13.0	7.3967	7	330	19.1	5.90
252	0.21409	22.0	5.86	0	0.4310	6.438	8.9	7.3967	7	330	19.1	3.59
253	0.08221	22.0	5.86	0	0.4310	6.957	6.8	8.9067	7	330	19.1	3.53
254	0.36894	22.0	5.86	0	0.4310	8.259	8.4	8.9067	7	330	19.1	3.54
255	0.04819	80.0	3.64	0	0.3920	6.108	32.0	9.2203	1	315	16.4	6.57
256	0.03548	80.0	3.64	0	0.3920	5.876	19.1	9.2203	1	315	16.4	9.25
257	0.01538	90.0	3.75	0	0.3940	7.454	34.2	6.3361	3	244	15.9	3.11
258	0.61154	20.0	3.97	0	0.6470	8.704	86.9	1.8010	5	264	13.0	5.12
259	0.66351	20.0	3.97	0	0.6470	7.333	100.0	1.8946	5	264	13.0	7.79

260	0.65665	20.0	3.97	0	0.6470	6.842	100.0	2.0107	5	264	13.0	6.90
261	0.54011	20.0	3.97	0	0.6470	7.203	81.8	2.1121	5	264	13.0	9.59
262	0.53412	20.0	3.97	0	0.6470	7.520	89.4	2.1398	5	264	13.0	7.26
263	0.52014	20.0	3.97	0	0.6470	8.398	91.5	2.2885	5	264	13.0	5.91
264	0.82526	20.0	3.97	0	0.6470	7.327	94.5	2.0788	5	264	13.0	11.25
265	0.55007	20.0	3.97	0	0.6470	7.206	91.6	1.9301	5	264	13.0	8.10
266	0.76162	20.0	3.97	0	0.6470	5.560	62.8	1.9865	5	264	13.0	10.45
267	0.78570	20.0	3.97	0	0.6470	7.014	84.6	2.1329	5	264	13.0	14.79
268	0.57834	20.0	3.97	0	0.5750	8.297	67.0	2.4216	5	264	13.0	7.44
269	0.54050	20.0	3.97	0	0.5750	7.470	52.6	2.8720	5	264	13.0	3.16
270	0.09065	20.0	6.96	1	0.4640	5.920	61.5	3.9175	3	223	18.6	13.65
271	0.29916	20.0	6.96	0	0.4640	5.856	42.1	4.4290	3	223	18.6	13.00
272	0.16211	20.0	6.96	0	0.4640	6.240	16.3	4.4290	3	223	18.6	6.59
273	0.11460	20.0	6.96	0	0.4640	6.538	58.7	3.9175	3	223	18.6	7.73
274	0.22188	20.0	6.96	1	0.4640	7.691	51.8	4.3665	3	223	18.6	6.58
275	0.05644	40.0	6.41	1	0.4470	6.758	32.9	4.0776	4	254	17.6	3.53
276	0.09604	40.0	6.41	0	0.4470	6.854	42.8	4.2673	4	254	17.6	2.98
277	0.10469	40.0	6.41	1	0.4470	7.267	49.0	4.7872	4	254	17.6	6.05
278	0.06127	40.0	6.41	1	0.4470	6.826	27.6	4.8628	4	254	17.6	4.16
279	0.07978	40.0	6.41	0	0.4470	6.482	32.1	4.1403	4	254	17.6	7.19
280	0.21038	20.0	3.33	0	0.4429	6.812	32.2	4.1007	5	216	14.9	4.85
281	0.03578	20.0	3.33	0	0.4429	7.820	64.5	4.6947	5	216	14.9	3.76
282	0.03705	20.0	3.33	0	0.4429	6.968	37.2	5.2447	5	216	14.9	4.59
283	0.06129	20.0	3.33	1	0.4429	7.645	49.7	5.2119	5	216	14.9	3.01
284	0.01501	90.0	1.21	1	0.4010	7.923	24.8	5.8850	1	198	13.6	3.16
285	0.00906	90.0	2.97	0	0.4000	7.088	20.8	7.3073	1	285	15.3	7.85
286	0.01096	55.0	2.25	0	0.3890	6.453	31.9	7.3073	1	300	15.3	8.23
287	0.01965	80.0	1.76	0	0.3850	6.230	31.5	9.0892	1	241	18.2	12.93
288	0.03871	52.5	5.32	0	0.4050	6.209	31.3	7.3172	6	293	16.6	7.14
289	0.04590	52.5	5.32	0	0.4050	6.315	45.6	7.3172	6	293	16.6	7.60
290	0.04297	52.5	5.32	0	0.4050	6.565	22.9	7.3172	6	293	16.6	9.51
291	0.03502	80.0	4.95	0	0.4110	6.861	27.9	5.1167	4	245	19.2	3.33
292	0.07886	80.0	4.95	0	0.4110	7.148	27.7	5.1167	4	245	19.2	3.56
293	0.03615	80.0	4.95	0	0.4110	6.630	23.4	5.1167	4	245	19.2	4.70
294	0.08265	0.0	13.92	0	0.4370	6.127	18.4	5.5027	4	289	16.0	8.58
295	0.08199	0.0	13.92	0	0.4370	6.009	42.3	5.5027	4	289	16.0	10.40
296	0.12932	0.0	13.92	0	0.4370	6.678	31.1	5.9604	4	289	16.0	6.27
297	0.05372	0.0	13.92	0	0.4370	6.549	51.0	5.9604	4	289	16.0	7.39
298	0.14103	0.0	13.92	0	0.4370	5.790	58.0	6.3200	4	289	16.0	15.84
299	0.06466	70.0	2.24	0	0.4000	6.345	20.1	7.8278	5	358	14.8	4.97
300	0.05561	70.0	2.24	0	0.4000	7.041	10.0	7.8278	5	358	14.8	4.74
301	0.04417	70.0	2.24	0	0.4000	6.871	47.4	7.8278	5	358	14.8	6.07
302	0.03537	34.0	6.09	0	0.4330	6.590	40.4	5.4917	7	329	16.1	9.50

303	0.09266	34.0	6.09	0	0.4330	6.495	18.4	5.4917	7	329	16.1	8.67
304	0.10000	34.0	6.09	0	0.4330	6.982	17.7	5.4917	7	329	16.1	4.86
305	0.05515	33.0	2.18	0	0.4720	7.236	41.1	4.0220	7	222	18.4	6.93
306	0.05479	33.0	2.18	0	0.4720	6.616	58.1	3.3700	7	222	18.4	8.93
307	0.07503	33.0	2.18	0	0.4720	7.420	71.9	3.0992	7	222	18.4	6.47
308	0.04932	33.0	2.18	0	0.4720	6.849	70.3	3.1827	7	222	18.4	7.53
309	0.49298	0.0	9.90	0	0.5440	6.635	82.5	3.3175	4	304	18.4	4.54
310	0.34940	0.0	9.90	0	0.5440	5.972	76.7	3.1025	4	304	18.4	9.97
311	2.63548	0.0	9.90	0	0.5440	4.973	37.8	2.5194	4	304	18.4	12.64
312	0.79041	0.0	9.90	0	0.5440	6.122	52.8	2.6403	4	304	18.4	5.98
313	0.26169	0.0	9.90	0	0.5440	6.023	90.4	2.8340	4	304	18.4	11.72
314	0.26938	0.0	9.90	0	0.5440	6.266	82.8	3.2628	4	304	18.4	7.90
315	0.36920	0.0	9.90	0	0.5440	6.567	87.3	3.6023	4	304	18.4	9.28
316	0.25356	0.0	9.90	0	0.5440	5.705	77.7	3.9450	4	304	18.4	11.50
317	0.31827	0.0	9.90	0	0.5440	5.914	83.2	3.9986	4	304	18.4	18.33
318	0.24522	0.0	9.90	0	0.5440	5.782	71.7	4.0317	4	304	18.4	15.94
319	0.40202	0.0	9.90	0	0.5440	6.382	67.2	3.5325	4	304	18.4	10.36
320	0.47547	0.0	9.90	0	0.5440	6.113	58.8	4.0019	4	304	18.4	12.73
321	0.16760	0.0	7.38	0	0.4930	6.426	52.3	4.5404	5	287	19.6	7.20
322	0.18159	0.0	7.38	0	0.4930	6.376	54.3	4.5404	5	287	19.6	6.87
323	0.35114	0.0	7.38	0	0.4930	6.041	49.9	4.7211	5	287	19.6	7.70
324	0.28392	0.0	7.38	0	0.4930	5.708	74.3	4.7211	5	287	19.6	11.74
325	0.34109	0.0	7.38	0	0.4930	6.415	40.1	4.7211	5	287	19.6	6.12
326	0.19186	0.0	7.38	0	0.4930	6.431	14.7	5.4159	5	287	19.6	5.08
327	0.30347	0.0	7.38	0	0.4930	6.312	28.9	5.4159	5	287	19.6	6.15
328	0.24103	0.0	7.38	0	0.4930	6.083	43.7	5.4159	5	287	19.6	12.79
329	0.06617	0.0	3.24	0	0.4600	5.868	25.8	5.2146	4	430	16.9	9.97
330	0.06724	0.0	3.24	0	0.4600	6.333	17.2	5.2146	4	430	16.9	7.34
331	0.04544	0.0	3.24	0	0.4600	6.144	32.2	5.8736	4	430	16.9	9.09
332	0.05023	35.0	6.06	0	0.4379	5.706	28.4	6.6407	1	304	16.9	12.43
333	0.03466	35.0	6.06	0	0.4379	6.031	23.3	6.6407	1	304	16.9	7.83
334	0.05083	0.0	5.19	0	0.5150	6.316	38.1	6.4584	5	224	20.2	5.68
335	0.03738	0.0	5.19	0	0.5150	6.310	38.5	6.4584	5	224	20.2	6.75
336	0.03961	0.0	5.19	0	0.5150	6.037	34.5	5.9853	5	224	20.2	8.01
337	0.03427	0.0	5.19	0	0.5150	5.869	46.3	5.2311	5	224	20.2	9.80
338	0.03041	0.0	5.19	0	0.5150	5.895	59.6	5.6150	5	224	20.2	10.56
339	0.03306	0.0	5.19	0	0.5150	6.059	37.3	4.8122	5	224	20.2	8.51
340	0.05497	0.0	5.19	0	0.5150	5.985	45.4	4.8122	5	224	20.2	9.74
341	0.06151	0.0	5.19	0	0.5150	5.968	58.5	4.8122	5	224	20.2	9.29
342	0.01301	35.0	1.52	0	0.4420	7.241	49.3	7.0379	1	284	15.5	5.49
343	0.02498	0.0	1.89	0	0.5180	6.540	59.7	6.2669	1	422	15.9	8.65
344	0.02543	55.0	3.78	0	0.4840	6.696	56.4	5.7321	5	370	17.6	7.18
345	0.03049	55.0	3.78	0	0.4840	6.874	28.1	6.4654	5	370	17.6	4.61

346	0.03113	0.0	4.39	0	0.4420	6.014	48.5	8.0136	3	352	18.8	10.53
347	0.06162	0.0	4.39	0	0.4420	5.898	52.3	8.0136	3	352	18.8	12.67
348	0.01870	85.0	4.15	0	0.4290	6.516	27.7	8.5353	4	351	17.9	6.36
349	0.01501	80.0	2.01	0	0.4350	6.635	29.7	8.3440	4	280	17.0	5.99
350	0.02899	40.0	1.25	0	0.4290	6.939	34.5	8.7921	1	335	19.7	5.89
351	0.06211	40.0	1.25	0	0.4290	6.490	44.4	8.7921	1	335	19.7	5.98
352	0.07950	60.0	1.69	0	0.4110	6.579	35.9	10.7103	4	411	18.3	5.49
353	0.07244	60.0	1.69	0	0.4110	5.884	18.5	10.7103	4	411	18.3	7.79
354	0.01709	90.0	2.02	0	0.4100	6.728	36.1	12.1265	5	187	17.0	4.50
355	0.04301	80.0	1.91	0	0.4130	5.663	21.9	10.5857	4	334	22.0	8.05
356	0.10659	80.0	1.91	0	0.4130	5.936	19.5	10.5857	4	334	22.0	5.57
357	8.98296	0.0	18.10	1	0.7700	6.212	97.4	2.1222	24	666	20.2	17.60
358	3.84970	0.0	18.10	1	0.7700	6.395	91.0	2.5052	24	666	20.2	13.27
359	5.20177	0.0	18.10	1	0.7700	6.127	83.4	2.7227	24	666	20.2	11.48
360	4.26131	0.0	18.10	0	0.7700	6.112	81.3	2.5091	24	666	20.2	12.67
361	4.54192	0.0	18.10	0	0.7700	6.398	88.0	2.5182	24	666	20.2	7.79
362	3.83684	0.0	18.10	0	0.7700	6.251	91.1	2.2955	24	666	20.2	14.19
363	3.67822	0.0	18.10	0	0.7700	5.362	96.2	2.1036	24	666	20.2	10.19
364	4.22239	0.0	18.10	1	0.7700	5.803	89.0	1.9047	24	666	20.2	14.64
365	3.47428	0.0	18.10	1	0.7180	8.780	82.9	1.9047	24	666	20.2	5.29
366	4.55587	0.0	18.10	0	0.7180	3.561	87.9	1.6132	24	666	20.2	7.12
367	3.69695	0.0	18.10	0	0.7180	4.963	91.4	1.7523	24	666	20.2	14.00
368	13.52220	0.0	18.10	0	0.6310	3.863	100.0	1.5106	24	666	20.2	13.33
369	4.89822	0.0	18.10	0	0.6310	4.970	100.0	1.3325	24	666	20.2	3.26
370	5.66998	0.0	18.10	1	0.6310	6.683	96.8	1.3567	24	666	20.2	3.73
371	6.53876	0.0	18.10	1	0.6310	7.016	97.5	1.2024	24	666	20.2	2.96
372	9.23230	0.0	18.10	0	0.6310	6.216	100.0	1.1691	24	666	20.2	9.53
373	8.26725	0.0	18.10	1	0.6680	5.875	89.6	1.1296	24	666	20.2	8.88
374	11.10810	0.0	18.10	0	0.6680	4.906	100.0	1.1742	24	666	20.2	34.77
375	18.49820	0.0	18.10	0	0.6680	4.138	100.0	1.1370	24	666	20.2	37.97
376	19.60910	0.0	18.10	0	0.6710	7.313	97.9	1.3163	24	666	20.2	13.44
377	15.28800	0.0	18.10	0	0.6710	6.649	93.3	1.3449	24	666	20.2	23.24
378	9.82349	0.0	18.10	0	0.6710	6.794	98.8	1.3580	24	666	20.2	21.24
379	23.64820	0.0	18.10	0	0.6710	6.380	96.2	1.3861	24	666	20.2	23.69
380	17.86670	0.0	18.10	0	0.6710	6.223	100.0	1.3861	24	666	20.2	21.78
381	88.97620	0.0	18.10	0	0.6710	6.968	91.9	1.4165	24	666	20.2	17.21
382	15.87440	0.0	18.10	0	0.6710	6.545	99.1	1.5192	24	666	20.2	21.08
383	9.18702	0.0	18.10	0	0.7000	5.536	100.0	1.5804	24	666	20.2	23.60
384	7.99248	0.0	18.10	0	0.7000	5.520	100.0	1.5331	24	666	20.2	24.56
385	20.08490	0.0	18.10	0	0.7000	4.368	91.2	1.4395	24	666	20.2	30.63
386	16.81180	0.0	18.10	0	0.7000	5.277	98.1	1.4261	24	666	20.2	30.81
387	24.39380	0.0	18.10	0	0.7000	4.652	100.0	1.4672	24	666	20.2	28.28
388	22.59710	0.0	18.10	0	0.7000	5.000	89.5	1.5184	24	666	20.2	31.99

389	14.33370	0.0	18.10	0	0.7000	4.880	100.0	1.5895	24	666	20.2	30.62
390	8.15174	0.0	18.10	0	0.7000	5.390	98.9	1.7281	24	666	20.2	20.85
391	6.96215	0.0	18.10	0	0.7000	5.713	97.0	1.9265	24	666	20.2	17.11
392	5.29305	0.0	18.10	0	0.7000	6.051	82.5	2.1678	24	666	20.2	18.76
393	11.57790	0.0	18.10	0	0.7000	5.036	97.0	1.7700	24	666	20.2	25.68
394	8.64476	0.0	18.10	0	0.6930	6.193	92.6	1.7912	24	666	20.2	15.17
395	13.35980	0.0	18.10	0	0.6930	5.887	94.7	1.7821	24	666	20.2	16.35
396	8.71675	0.0	18.10	0	0.6930	6.471	98.8	1.7257	24	666	20.2	17.12
397	5.87205	0.0	18.10	0	0.6930	6.405	96.0	1.6768	24	666	20.2	19.37
398	7.67202	0.0	18.10	0	0.6930	5.747	98.9	1.6334	24	666	20.2	19.92
399	38.35180	0.0	18.10	0	0.6930	5.453	100.0	1.4896	24	666	20.2	30.59
400	9.91655	0.0	18.10	0	0.6930	5.852	77.8	1.5004	24	666	20.2	29.97
401	25.04610	0.0	18.10	0	0.6930	5.987	100.0	1.5888	24	666	20.2	26.77
402	14.23620	0.0	18.10	0	0.6930	6.343	100.0	1.5741	24	666	20.2	20.32
403	9.59571	0.0	18.10	0	0.6930	6.404	100.0	1.6390	24	666	20.2	20.31
404	24.80170	0.0	18.10	0	0.6930	5.349	96.0	1.7028	24	666	20.2	19.77
405	41.52920	0.0	18.10	0	0.6930	5.531	85.4	1.6074	24	666	20.2	27.38
406	67.92080	0.0	18.10	0	0.6930	5.683	100.0	1.4254	24	666	20.2	22.98
407	20.71620	0.0	18.10	0	0.6590	4.138	100.0	1.1781	24	666	20.2	23.34
408	11.95110	0.0	18.10	0	0.6590	5.608	100.0	1.2852	24	666	20.2	12.13
409	7.40389	0.0	18.10	0	0.5970	5.617	97.9	1.4547	24	666	20.2	26.40
410	14.43830	0.0	18.10	0	0.5970	6.852	100.0	1.4655	24	666	20.2	19.78
411	51.13580	0.0	18.10	0	0.5970	5.757	100.0	1.4130	24	666	20.2	10.11
412	14.05070	0.0	18.10	0	0.5970	6.657	100.0	1.5275	24	666	20.2	21.22
413	18.81100	0.0	18.10	0	0.5970	4.628	100.0	1.5539	24	666	20.2	34.37
414	28.65580	0.0	18.10	0	0.5970	5.155	100.0	1.5894	24	666	20.2	20.08
415	45.74610	0.0	18.10	0	0.6930	4.519	100.0	1.6582	24	666	20.2	36.98
416	18.08460	0.0	18.10	0	0.6790	6.434	100.0	1.8347	24	666	20.2	29.05
417	10.83420	0.0	18.10	0	0.6790	6.782	90.8	1.8195	24	666	20.2	25.79
418	25.94060	0.0	18.10	0	0.6790	5.304	89.1	1.6475	24	666	20.2	26.64
419	73.53410	0.0	18.10	0	0.6790	5.957	100.0	1.8026	24	666	20.2	20.62
420	11.81230	0.0	18.10	0	0.7180	6.824	76.5	1.7940	24	666	20.2	22.74
421	11.08740	0.0	18.10	0	0.7180	6.411	100.0	1.8589	24	666	20.2	15.02
422	7.02259	0.0	18.10	0	0.7180	6.006	95.3	1.8746	24	666	20.2	15.70
423	12.04820	0.0	18.10	0	0.6140	5.648	87.6	1.9512	24	666	20.2	14.10
424	7.05042	0.0	18.10	0	0.6140	6.103	85.1	2.0218	24	666	20.2	23.29
425	8.79212	0.0	18.10	0	0.5840	5.565	70.6	2.0635	24	666	20.2	17.16
426	15.86030	0.0	18.10	0	0.6790	5.896	95.4	1.9096	24	666	20.2	24.39
427	12.24720	0.0	18.10	0	0.5840	5.837	59.7	1.9976	24	666	20.2	15.69
428	37.66190	0.0	18.10	0	0.6790	6.202	78.7	1.8629	24	666	20.2	14.52
429	7.36711	0.0	18.10	0	0.6790	6.193	78.1	1.9356	24	666	20.2	21.52
430	9.33889	0.0	18.10	0	0.6790	6.380	95.6	1.9682	24	666	20.2	24.08
431	8.49213	0.0	18.10	0	0.5840	6.348	86.1	2.0527	24	666	20.2	17.64

432	10.06230	0.0	18.10	0	0.5840	6.833	94.3	2.0882	24	666	20.2	19.69
433	6.44405	0.0	18.10	0	0.5840	6.425	74.8	2.2004	24	666	20.2	12.03
434	5.58107	0.0	18.10	0	0.7130	6.436	87.9	2.3158	24	666	20.2	16.22
435	13.91340	0.0	18.10	0	0.7130	6.208	95.0	2.2222	24	666	20.2	15.17
436	11.16040	0.0	18.10	0	0.7400	6.629	94.6	2.1247	24	666	20.2	23.27
437	14.42080	0.0	18.10	0	0.7400	6.461	93.3	2.0026	24	666	20.2	18.05
438	15.17720	0.0	18.10	0	0.7400	6.152	100.0	1.9142	24	666	20.2	26.45
439	13.67810	0.0	18.10	0	0.7400	5.935	87.9	1.8206	24	666	20.2	34.02
440	9.39063	0.0	18.10	0	0.7400	5.627	93.9	1.8172	24	666	20.2	22.88
441	22.05110	0.0	18.10	0	0.7400	5.818	92.4	1.8662	24	666	20.2	22.11
442	9.72418	0.0	18.10	0	0.7400	6.406	97.2	2.0651	24	666	20.2	19.52
443	5.66637	0.0	18.10	0	0.7400	6.219	100.0	2.0048	24	666	20.2	16.59
444	9.96654	0.0	18.10	0	0.7400	6.485	100.0	1.9784	24	666	20.2	18.85
445	12.80230	0.0	18.10	0	0.7400	5.854	96.6	1.8956	24	666	20.2	23.79
446	10.67180	0.0	18.10	0	0.7400	6.459	94.8	1.9879	24	666	20.2	23.98
447	6.28807	0.0	18.10	0	0.7400	6.341	96.4	2.0720	24	666	20.2	17.79
448	9.92485	0.0	18.10	0	0.7400	6.251	96.6	2.1980	24	666	20.2	16.44
449	9.32909	0.0	18.10	0	0.7130	6.185	98.7	2.2616	24	666	20.2	18.13
450	7.52601	0.0	18.10	0	0.7130	6.417	98.3	2.1850	24	666	20.2	19.31
451	6.71772	0.0	18.10	0	0.7130	6.749	92.6	2.3236	24	666	20.2	17.44
452	5.44114	0.0	18.10	0	0.7130	6.655	98.2	2.3552	24	666	20.2	17.73
453	5.09017	0.0	18.10	0	0.7130	6.297	91.8	2.3682	24	666	20.2	17.27
454	8.24809	0.0	18.10	0	0.7130	7.393	99.3	2.4527	24	666	20.2	16.74
455	9.51363	0.0	18.10	0	0.7130	6.728	94.1	2.4961	24	666	20.2	18.71
456	4.75237	0.0	18.10	0	0.7130	6.525	86.5	2.4358	24	666	20.2	18.13
457	4.66883	0.0	18.10	0	0.7130	5.976	87.9	2.5806	24	666	20.2	19.01
458	8.20058	0.0	18.10	0	0.7130	5.936	80.3	2.7792	24	666	20.2	16.94
459	7.75223	0.0	18.10	0	0.7130	6.301	83.7	2.7831	24	666	20.2	16.23
460	6.80117	0.0	18.10	0	0.7130	6.081	84.4	2.7175	24	666	20.2	14.70
461	4.81213	0.0	18.10	0	0.7130	6.701	90.0	2.5975	24	666	20.2	16.42
462	3.69311	0.0	18.10	0	0.7130	6.376	88.4	2.5671	24	666	20.2	14.65
463	6.65492	0.0	18.10	0	0.7130	6.317	83.0	2.7344	24	666	20.2	13.99
464	5.82115	0.0	18.10	0	0.7130	6.513	89.9	2.8016	24	666	20.2	10.29
465	7.83932	0.0	18.10	0	0.6550	6.209	65.4	2.9634	24	666	20.2	13.22
466	3.16360	0.0	18.10	0	0.6550	5.759	48.2	3.0665	24	666	20.2	14.13
467	3.77498	0.0	18.10	0	0.6550	5.952	84.7	2.8715	24	666	20.2	17.15
468	4.42228	0.0	18.10	0	0.5840	6.003	94.5	2.5403	24	666	20.2	21.32
469	15.57570	0.0	18.10	0	0.5800	5.926	71.0	2.9084	24	666	20.2	18.13
470	13.07510	0.0	18.10	0	0.5800	5.713	56.7	2.8237	24	666	20.2	14.76
471	4.34879	0.0	18.10	0	0.5800	6.167	84.0	3.0334	24	666	20.2	16.29
472	4.03841	0.0	18.10	0	0.5320	6.229	90.7	3.0993	24	666	20.2	12.87
473	3.56868	0.0	18.10	0	0.5800	6.437	75.0	2.8965	24	666	20.2	14.36
474	4.64689	0.0	18.10	0	0.6140	6.980	67.6	2.5329	24	666	20.2	11.66

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475  8.05579   0.0 18.10    0 0.5840 5.427  95.4  2.4298  24 666    20.2 18.14
476  6.39312   0.0 18.10    0 0.5840 6.162  97.4  2.2060  24 666    20.2 24.10
477  4.87141   0.0 18.10    0 0.6140 6.484  93.6  2.3053  24 666    20.2 18.68
478 15.02340   0.0 18.10    0 0.6140 5.304  97.3  2.1007  24 666    20.2 24.91
479 10.23300   0.0 18.10    0 0.6140 6.185  96.7  2.1705  24 666    20.2 18.03
480 14.33370   0.0 18.10    0 0.6140 6.229  88.0  1.9512  24 666    20.2 13.11
481  5.82401   0.0 18.10    0 0.5320 6.242  64.7  3.4242  24 666    20.2 10.74
482  5.70818   0.0 18.10    0 0.5320 6.750  74.9  3.3317  24 666    20.2  7.74
483  5.73116   0.0 18.10    0 0.5320 7.061  77.0  3.4106  24 666    20.2  7.01
484  2.81838   0.0 18.10    0 0.5320 5.762  40.3  4.0983  24 666    20.2 10.42
485  2.37857   0.0 18.10    0 0.5830 5.871  41.9  3.7240  24 666    20.2 13.34
486  3.67367   0.0 18.10    0 0.5830 6.312  51.9  3.9917  24 666    20.2 10.58
487  5.69175   0.0 18.10    0 0.5830 6.114  79.8  3.5459  24 666    20.2 14.98
488  4.83567   0.0 18.10    0 0.5830 5.905  53.2  3.1523  24 666    20.2 11.45
489  0.15086   0.0 27.74    0 0.6090 5.454  92.7  1.8209   4 711    20.1 18.06
490  0.18337   0.0 27.74    0 0.6090 5.414  98.3  1.7554   4 711    20.1 23.97
491  0.20746   0.0 27.74    0 0.6090 5.093  98.0  1.8226   4 711    20.1 29.68
492  0.10574   0.0 27.74    0 0.6090 5.983  98.8  1.8681   4 711    20.1 18.07
493  0.11132   0.0 27.74    0 0.6090 5.983  83.5  2.1099   4 711    20.1 13.35
494  0.17331   0.0  9.69    0 0.5850 5.707  54.0  2.3817   6 391    19.2 12.01
495  0.27957   0.0  9.69    0 0.5850 5.926  42.6  2.3817   6 391    19.2 13.59
496  0.17899   0.0  9.69    0 0.5850 5.670  28.8  2.7986   6 391    19.2 17.60
497  0.28960   0.0  9.69    0 0.5850 5.390  72.9  2.7986   6 391    19.2 21.14
498  0.26838   0.0  9.69    0 0.5850 5.794  70.6  2.8927   6 391    19.2 14.10
499  0.23912   0.0  9.69    0 0.5850 6.019  65.3  2.4091   6 391    19.2 12.92
500  0.17783   0.0  9.69    0 0.5850 5.569  73.5  2.3999   6 391    19.2 15.10
501  0.22438   0.0  9.69    0 0.5850 6.027  79.7  2.4982   6 391    19.2 14.33
502  0.06263   0.0 11.93    0 0.5730 6.593  69.1  2.4786   1 273    21.0  9.67
503  0.04527   0.0 11.93    0 0.5730 6.120  76.7  2.2875   1 273    21.0  9.08
504  0.06076   0.0 11.93    0 0.5730 6.976  91.0  2.1675   1 273    21.0  5.64
505  0.10959   0.0 11.93    0 0.5730 6.794  89.3  2.3889   1 273    21.0  6.48
506  0.04741   0.0 11.93    0 0.5730 6.030  80.8  2.5050   1 273    21.0  7.88
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[[3]]
[[3]]$train
        crim    zn indus chas    nox    rm   age     dis rad tax ptratio lstat
1    0.00632  18.0  2.31    0 0.5380 6.575  65.2  4.0900   1 296    15.3  4.98
2    0.02731   0.0  7.07    0 0.4690 6.421  78.9  4.9671   2 242    17.8  9.14
3    0.02729   0.0  7.07    0 0.4690 7.185  61.1  4.9671   2 242    17.8  4.03
4    0.03237   0.0  2.18    0 0.4580 6.998  45.8  6.0622   3 222    18.7  2.94
5    0.06905   0.0  2.18    0 0.4580 7.147  54.2  6.0622   3 222    18.7  5.33
6    0.02985   0.0  2.18    0 0.4580 6.430  58.7  6.0622   3 222    18.7  5.21
7    0.08829  12.5  7.87    0 0.5240 6.012  66.6  5.5605   5 311    15.2 12.43
8    0.14455  12.5  7.87    0 0.5240 6.172  96.1  5.9505   5 311    15.2 19.15
9    0.21124  12.5  7.87    0 0.5240 5.631 100.0  6.0821   5 311    15.2 29.93
10   0.17004  12.5  7.87    0 0.5240 6.004  85.9  6.5921   5 311    15.2 17.10
11   0.22489  12.5  7.87    0 0.5240 6.377  94.3  6.3467   5 311    15.2 20.45
12   0.11747  12.5  7.87    0 0.5240 6.009  82.9  6.2267   5 311    15.2 13.27
13   0.09378  12.5  7.87    0 0.5240 5.889  39.0  5.4509   5 311    15.2 15.71
14   0.62976   0.0  8.14    0 0.5380 5.949  61.8  4.7075   4 307    21.0  8.26
15   0.63796   0.0  8.14    0 0.5380 6.096  84.5  4.4619   4 307    21.0 10.26
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16	0.62739	0.0	8.14	0	0.5380	5.834	56.5	4.4986	4	307	21.0	8.47
17	1.05393	0.0	8.14	0	0.5380	5.935	29.3	4.4986	4	307	21.0	6.58
18	0.78420	0.0	8.14	0	0.5380	5.990	81.7	4.2579	4	307	21.0	14.67
19	0.80271	0.0	8.14	0	0.5380	5.456	36.6	3.7965	4	307	21.0	11.69
20	0.72580	0.0	8.14	0	0.5380	5.727	69.5	3.7965	4	307	21.0	11.28
21	1.25179	0.0	8.14	0	0.5380	5.570	98.1	3.7979	4	307	21.0	21.02
22	0.85204	0.0	8.14	0	0.5380	5.965	89.2	4.0123	4	307	21.0	13.83
23	1.23247	0.0	8.14	0	0.5380	6.142	91.7	3.9769	4	307	21.0	18.72
24	0.98843	0.0	8.14	0	0.5380	5.813	100.0	4.0952	4	307	21.0	19.88
25	0.75026	0.0	8.14	0	0.5380	5.924	94.1	4.3996	4	307	21.0	16.30
26	0.84054	0.0	8.14	0	0.5380	5.599	85.7	4.4546	4	307	21.0	16.51
27	0.67191	0.0	8.14	0	0.5380	5.813	90.3	4.6820	4	307	21.0	14.81
28	0.95577	0.0	8.14	0	0.5380	6.047	88.8	4.4534	4	307	21.0	17.28
29	0.77299	0.0	8.14	0	0.5380	6.495	94.4	4.4547	4	307	21.0	12.80
30	1.00245	0.0	8.14	0	0.5380	6.674	87.3	4.2390	4	307	21.0	11.98
31	1.13081	0.0	8.14	0	0.5380	5.713	94.1	4.2330	4	307	21.0	22.60
32	1.35472	0.0	8.14	0	0.5380	6.072	100.0	4.1750	4	307	21.0	13.04
33	1.38799	0.0	8.14	0	0.5380	5.950	82.0	3.9900	4	307	21.0	27.71
34	1.15172	0.0	8.14	0	0.5380	5.701	95.0	3.7872	4	307	21.0	18.35
35	1.61282	0.0	8.14	0	0.5380	6.096	96.9	3.7598	4	307	21.0	20.34
36	0.06417	0.0	5.96	0	0.4990	5.933	68.2	3.3603	5	279	19.2	9.68
37	0.09744	0.0	5.96	0	0.4990	5.841	61.4	3.3779	5	279	19.2	11.41
38	0.08014	0.0	5.96	0	0.4990	5.850	41.5	3.9342	5	279	19.2	8.77
39	0.17505	0.0	5.96	0	0.4990	5.966	30.2	3.8473	5	279	19.2	10.13
40	0.02763	75.0	2.95	0	0.4280	6.595	21.8	5.4011	3	252	18.3	4.32
41	0.03359	75.0	2.95	0	0.4280	7.024	15.8	5.4011	3	252	18.3	1.98
42	0.12744	0.0	6.91	0	0.4480	6.770	2.9	5.7209	3	233	17.9	4.84
43	0.14150	0.0	6.91	0	0.4480	6.169	6.6	5.7209	3	233	17.9	5.81
44	0.15936	0.0	6.91	0	0.4480	6.211	6.5	5.7209	3	233	17.9	7.44
45	0.12269	0.0	6.91	0	0.4480	6.069	40.0	5.7209	3	233	17.9	9.55
46	0.17142	0.0	6.91	0	0.4480	5.682	33.8	5.1004	3	233	17.9	10.21
47	0.18836	0.0	6.91	0	0.4480	5.786	33.3	5.1004	3	233	17.9	14.15
48	0.22927	0.0	6.91	0	0.4480	6.030	85.5	5.6894	3	233	17.9	18.80
49	0.25387	0.0	6.91	0	0.4480	5.399	95.3	5.8700	3	233	17.9	30.81
50	0.21977	0.0	6.91	0	0.4480	5.602	62.0	6.0877	3	233	17.9	16.20
51	0.08873	21.0	5.64	0	0.4390	5.963	45.7	6.8147	4	243	16.8	13.45
52	0.04337	21.0	5.64	0	0.4390	6.115	63.0	6.8147	4	243	16.8	9.43
53	0.05360	21.0	5.64	0	0.4390	6.511	21.1	6.8147	4	243	16.8	5.28
54	0.04981	21.0	5.64	0	0.4390	5.998	21.4	6.8147	4	243	16.8	8.43
55	0.01360	75.0	4.00	0	0.4100	5.888	47.6	7.3197	3	469	21.1	14.80
56	0.01311	90.0	1.22	0	0.4030	7.249	21.9	8.6966	5	226	17.9	4.81
57	0.02055	85.0	0.74	0	0.4100	6.383	35.7	9.1876	2	313	17.3	5.77
58	0.01432	100.0	1.32	0	0.4110	6.816	40.5	8.3248	5	256	15.1	3.95

59	0.15445	25.0	5.13	0	0.4530	6.145	29.2	7.8148	8	284	19.7	6.86
60	0.10328	25.0	5.13	0	0.4530	5.927	47.2	6.9320	8	284	19.7	9.22
61	0.14932	25.0	5.13	0	0.4530	5.741	66.2	7.2254	8	284	19.7	13.15
62	0.17171	25.0	5.13	0	0.4530	5.966	93.4	6.8185	8	284	19.7	14.44
63	0.11027	25.0	5.13	0	0.4530	6.456	67.8	7.2255	8	284	19.7	6.73
64	0.12650	25.0	5.13	0	0.4530	6.762	43.4	7.9809	8	284	19.7	9.50
65	0.01951	17.5	1.38	0	0.4161	7.104	59.5	9.2229	3	216	18.6	8.05
66	0.03584	80.0	3.37	0	0.3980	6.290	17.8	6.6115	4	337	16.1	4.67
67	0.04379	80.0	3.37	0	0.3980	5.787	31.1	6.6115	4	337	16.1	10.24
68	0.05789	12.5	6.07	0	0.4090	5.878	21.4	6.4980	4	345	18.9	8.10
69	0.13554	12.5	6.07	0	0.4090	5.594	36.8	6.4980	4	345	18.9	13.09
70	0.12816	12.5	6.07	0	0.4090	5.885	33.0	6.4980	4	345	18.9	8.79
71	0.08826	0.0	10.81	0	0.4130	6.417	6.6	5.2873	4	305	19.2	6.72
72	0.15876	0.0	10.81	0	0.4130	5.961	17.5	5.2873	4	305	19.2	9.88
73	0.09164	0.0	10.81	0	0.4130	6.065	7.8	5.2873	4	305	19.2	5.52
74	0.19539	0.0	10.81	0	0.4130	6.245	6.2	5.2873	4	305	19.2	7.54
75	0.07896	0.0	12.83	0	0.4370	6.273	6.0	4.2515	5	398	18.7	6.78
76	0.09512	0.0	12.83	0	0.4370	6.286	45.0	4.5026	5	398	18.7	8.94
77	0.10153	0.0	12.83	0	0.4370	6.279	74.5	4.0522	5	398	18.7	11.97
78	0.08707	0.0	12.83	0	0.4370	6.140	45.8	4.0905	5	398	18.7	10.27
79	0.05646	0.0	12.83	0	0.4370	6.232	53.7	5.0141	5	398	18.7	12.34
80	0.08387	0.0	12.83	0	0.4370	5.874	36.6	4.5026	5	398	18.7	9.10
81	0.04113	25.0	4.86	0	0.4260	6.727	33.5	5.4007	4	281	19.0	5.29
82	0.04462	25.0	4.86	0	0.4260	6.619	70.4	5.4007	4	281	19.0	7.22
83	0.03659	25.0	4.86	0	0.4260	6.302	32.2	5.4007	4	281	19.0	6.72
84	0.03551	25.0	4.86	0	0.4260	6.167	46.7	5.4007	4	281	19.0	7.51
85	0.05059	0.0	4.49	0	0.4490	6.389	48.0	4.7794	3	247	18.5	9.62
86	0.05735	0.0	4.49	0	0.4490	6.630	56.1	4.4377	3	247	18.5	6.53
87	0.05188	0.0	4.49	0	0.4490	6.015	45.1	4.4272	3	247	18.5	12.86
88	0.07151	0.0	4.49	0	0.4490	6.121	56.8	3.7476	3	247	18.5	8.44
89	0.05660	0.0	3.41	0	0.4890	7.007	86.3	3.4217	2	270	17.8	5.50
90	0.05302	0.0	3.41	0	0.4890	7.079	63.1	3.4145	2	270	17.8	5.70
91	0.04684	0.0	3.41	0	0.4890	6.417	66.1	3.0923	2	270	17.8	8.81
92	0.03932	0.0	3.41	0	0.4890	6.405	73.9	3.0921	2	270	17.8	8.20
93	0.04203	28.0	15.04	0	0.4640	6.442	53.6	3.6659	4	270	18.2	8.16
94	0.02875	28.0	15.04	0	0.4640	6.211	28.9	3.6659	4	270	18.2	6.21
95	0.04294	28.0	15.04	0	0.4640	6.249	77.3	3.6150	4	270	18.2	10.59
96	0.12204	0.0	2.89	0	0.4450	6.625	57.8	3.4952	2	276	18.0	6.65
97	0.11504	0.0	2.89	0	0.4450	6.163	69.6	3.4952	2	276	18.0	11.34
98	0.12083	0.0	2.89	0	0.4450	8.069	76.0	3.4952	2	276	18.0	4.21
99	0.08187	0.0	2.89	0	0.4450	7.820	36.9	3.4952	2	276	18.0	3.57
100	0.06860	0.0	2.89	0	0.4450	7.416	62.5	3.4952	2	276	18.0	6.19
101	0.14866	0.0	8.56	0	0.5200	6.727	79.9	2.7778	5	384	20.9	9.42

102	0.11432	0.0	8.56	0	0.5200	6.781	71.3	2.8561	5	384	20.9	7.67
103	0.22876	0.0	8.56	0	0.5200	6.405	85.4	2.7147	5	384	20.9	10.63
104	0.21161	0.0	8.56	0	0.5200	6.137	87.4	2.7147	5	384	20.9	13.44
105	0.13960	0.0	8.56	0	0.5200	6.167	90.0	2.4210	5	384	20.9	12.33
106	0.13262	0.0	8.56	0	0.5200	5.851	96.7	2.1069	5	384	20.9	16.47
107	0.17120	0.0	8.56	0	0.5200	5.836	91.9	2.2110	5	384	20.9	18.66
108	0.13117	0.0	8.56	0	0.5200	6.127	85.2	2.1224	5	384	20.9	14.09
109	0.12802	0.0	8.56	0	0.5200	6.474	97.1	2.4329	5	384	20.9	12.27
110	0.26363	0.0	8.56	0	0.5200	6.229	91.2	2.5451	5	384	20.9	15.55
111	0.10793	0.0	8.56	0	0.5200	6.195	54.4	2.7778	5	384	20.9	13.00
112	0.10084	0.0	10.01	0	0.5470	6.715	81.6	2.6775	6	432	17.8	10.16
113	0.12329	0.0	10.01	0	0.5470	5.913	92.9	2.3534	6	432	17.8	16.21
114	0.22212	0.0	10.01	0	0.5470	6.092	95.4	2.5480	6	432	17.8	17.09
115	0.14231	0.0	10.01	0	0.5470	6.254	84.2	2.2565	6	432	17.8	10.45
116	0.17134	0.0	10.01	0	0.5470	5.928	88.2	2.4631	6	432	17.8	15.76
117	0.13158	0.0	10.01	0	0.5470	6.176	72.5	2.7301	6	432	17.8	12.04
118	0.15098	0.0	10.01	0	0.5470	6.021	82.6	2.7474	6	432	17.8	10.30
119	0.13058	0.0	10.01	0	0.5470	5.872	73.1	2.4775	6	432	17.8	15.37
120	0.14476	0.0	10.01	0	0.5470	5.731	65.2	2.7592	6	432	17.8	13.61
121	0.06899	0.0	25.65	0	0.5810	5.870	69.7	2.2577	2	188	19.1	14.37
122	0.07165	0.0	25.65	0	0.5810	6.004	84.1	2.1974	2	188	19.1	14.27
123	0.09299	0.0	25.65	0	0.5810	5.961	92.9	2.0869	2	188	19.1	17.93
124	0.15038	0.0	25.65	0	0.5810	5.856	97.0	1.9444	2	188	19.1	25.41
125	0.09849	0.0	25.65	0	0.5810	5.879	95.8	2.0063	2	188	19.1	17.58
126	0.16902	0.0	25.65	0	0.5810	5.986	88.4	1.9929	2	188	19.1	14.81
127	0.38735	0.0	25.65	0	0.5810	5.613	95.6	1.7572	2	188	19.1	27.26
128	0.25915	0.0	21.89	0	0.6240	5.693	96.0	1.7883	4	437	21.2	17.19
129	0.32543	0.0	21.89	0	0.6240	6.431	98.8	1.8125	4	437	21.2	15.39
130	0.88125	0.0	21.89	0	0.6240	5.637	94.7	1.9799	4	437	21.2	18.34
131	0.34006	0.0	21.89	0	0.6240	6.458	98.9	2.1185	4	437	21.2	12.60
132	1.19294	0.0	21.89	0	0.6240	6.326	97.7	2.2710	4	437	21.2	12.26
133	0.59005	0.0	21.89	0	0.6240	6.372	97.9	2.3274	4	437	21.2	11.12
134	0.32982	0.0	21.89	0	0.6240	5.822	95.4	2.4699	4	437	21.2	15.03
135	0.97617	0.0	21.89	0	0.6240	5.757	98.4	2.3460	4	437	21.2	17.31
136	0.55778	0.0	21.89	0	0.6240	6.335	98.2	2.1107	4	437	21.2	16.96
137	0.32264	0.0	21.89	0	0.6240	5.942	93.5	1.9669	4	437	21.2	16.90
138	0.35233	0.0	21.89	0	0.6240	6.454	98.4	1.8498	4	437	21.2	14.59
139	0.24980	0.0	21.89	0	0.6240	5.857	98.2	1.6686	4	437	21.2	21.32
140	0.54452	0.0	21.89	0	0.6240	6.151	97.9	1.6687	4	437	21.2	18.46
141	0.29090	0.0	21.89	0	0.6240	6.174	93.6	1.6119	4	437	21.2	24.16
142	1.62864	0.0	21.89	0	0.6240	5.019	100.0	1.4394	4	437	21.2	34.41
143	3.32105	0.0	19.58	1	0.8710	5.403	100.0	1.3216	5	403	14.7	26.82
144	4.09740	0.0	19.58	0	0.8710	5.468	100.0	1.4118	5	403	14.7	26.42

145	2.77974	0.0	19.58	0	0.8710	4.903	97.8	1.3459	5	403	14.7	29.29
146	2.37934	0.0	19.58	0	0.8710	6.130	100.0	1.4191	5	403	14.7	27.80
147	2.15505	0.0	19.58	0	0.8710	5.628	100.0	1.5166	5	403	14.7	16.65
148	2.36862	0.0	19.58	0	0.8710	4.926	95.7	1.4608	5	403	14.7	29.53
149	2.33099	0.0	19.58	0	0.8710	5.186	93.8	1.5296	5	403	14.7	28.32
150	2.73397	0.0	19.58	0	0.8710	5.597	94.9	1.5257	5	403	14.7	21.45
151	1.65660	0.0	19.58	0	0.8710	6.122	97.3	1.6180	5	403	14.7	14.10
152	1.49632	0.0	19.58	0	0.8710	5.404	100.0	1.5916	5	403	14.7	13.28
153	1.12658	0.0	19.58	1	0.8710	5.012	88.0	1.6102	5	403	14.7	12.12
154	2.14918	0.0	19.58	0	0.8710	5.709	98.5	1.6232	5	403	14.7	15.79
155	1.41385	0.0	19.58	1	0.8710	6.129	96.0	1.7494	5	403	14.7	15.12
156	3.53501	0.0	19.58	1	0.8710	6.152	82.6	1.7455	5	403	14.7	15.02
157	2.44668	0.0	19.58	0	0.8710	5.272	94.0	1.7364	5	403	14.7	16.14
158	1.22358	0.0	19.58	0	0.6050	6.943	97.4	1.8773	5	403	14.7	4.59
159	1.34284	0.0	19.58	0	0.6050	6.066	100.0	1.7573	5	403	14.7	6.43
160	1.42502	0.0	19.58	0	0.8710	6.510	100.0	1.7659	5	403	14.7	7.39
161	1.27346	0.0	19.58	1	0.6050	6.250	92.6	1.7984	5	403	14.7	5.50
162	1.46336	0.0	19.58	0	0.6050	7.489	90.8	1.9709	5	403	14.7	1.73
163	1.83377	0.0	19.58	1	0.6050	7.802	98.2	2.0407	5	403	14.7	1.92
164	1.51902	0.0	19.58	1	0.6050	8.375	93.9	2.1620	5	403	14.7	3.32
165	2.24236	0.0	19.58	0	0.6050	5.854	91.8	2.4220	5	403	14.7	11.64
166	2.92400	0.0	19.58	0	0.6050	6.101	93.0	2.2834	5	403	14.7	9.81
167	2.01019	0.0	19.58	0	0.6050	7.929	96.2	2.0459	5	403	14.7	3.70
168	1.80028	0.0	19.58	0	0.6050	5.877	79.2	2.4259	5	403	14.7	12.14
169	2.30040	0.0	19.58	0	0.6050	6.319	96.1	2.1000	5	403	14.7	11.10
170	2.44953	0.0	19.58	0	0.6050	6.402	95.2	2.2625	5	403	14.7	11.32
171	1.20742	0.0	19.58	0	0.6050	5.875	94.6	2.4259	5	403	14.7	14.43
172	2.31390	0.0	19.58	0	0.6050	5.880	97.3	2.3887	5	403	14.7	12.03
173	0.13914	0.0	4.05	0	0.5100	5.572	88.5	2.5961	5	296	16.6	14.69
174	0.09178	0.0	4.05	0	0.5100	6.416	84.1	2.6463	5	296	16.6	9.04
175	0.08447	0.0	4.05	0	0.5100	5.859	68.7	2.7019	5	296	16.6	9.64
176	0.06664	0.0	4.05	0	0.5100	6.546	33.1	3.1323	5	296	16.6	5.33
177	0.07022	0.0	4.05	0	0.5100	6.020	47.2	3.5549	5	296	16.6	10.11
178	0.05425	0.0	4.05	0	0.5100	6.315	73.4	3.3175	5	296	16.6	6.29
179	0.06642	0.0	4.05	0	0.5100	6.860	74.4	2.9153	5	296	16.6	6.92
180	0.05780	0.0	2.46	0	0.4880	6.980	58.4	2.8290	3	193	17.8	5.04
181	0.06588	0.0	2.46	0	0.4880	7.765	83.3	2.7410	3	193	17.8	7.56
182	0.06888	0.0	2.46	0	0.4880	6.144	62.2	2.5979	3	193	17.8	9.45
183	0.09103	0.0	2.46	0	0.4880	7.155	92.2	2.7006	3	193	17.8	4.82
184	0.10008	0.0	2.46	0	0.4880	6.563	95.6	2.8470	3	193	17.8	5.68
185	0.08308	0.0	2.46	0	0.4880	5.604	89.8	2.9879	3	193	17.8	13.98
186	0.06047	0.0	2.46	0	0.4880	6.153	68.8	3.2797	3	193	17.8	13.15
187	0.05602	0.0	2.46	0	0.4880	7.831	53.6	3.1992	3	193	17.8	4.45

188	0.07875	45.0	3.44	0	0.4370	6.782	41.1	3.7886	5	398	15.2	6.68
189	0.12579	45.0	3.44	0	0.4370	6.556	29.1	4.5667	5	398	15.2	4.56
190	0.08370	45.0	3.44	0	0.4370	7.185	38.9	4.5667	5	398	15.2	5.39
191	0.09068	45.0	3.44	0	0.4370	6.951	21.5	6.4798	5	398	15.2	5.10
192	0.06911	45.0	3.44	0	0.4370	6.739	30.8	6.4798	5	398	15.2	4.69
193	0.08664	45.0	3.44	0	0.4370	7.178	26.3	6.4798	5	398	15.2	2.87
194	0.02187	60.0	2.93	0	0.4010	6.800	9.9	6.2196	1	265	15.6	5.03
195	0.01439	60.0	2.93	0	0.4010	6.604	18.8	6.2196	1	265	15.6	4.38
196	0.01381	80.0	0.46	0	0.4220	7.875	32.0	5.6484	4	255	14.4	2.97
197	0.04011	80.0	1.52	0	0.4040	7.287	34.1	7.3090	2	329	12.6	4.08
198	0.04666	80.0	1.52	0	0.4040	7.107	36.6	7.3090	2	329	12.6	8.61
199	0.03768	80.0	1.52	0	0.4040	7.274	38.3	7.3090	2	329	12.6	6.62
200	0.03150	95.0	1.47	0	0.4030	6.975	15.3	7.6534	3	402	17.0	4.56
201	0.01778	95.0	1.47	0	0.4030	7.135	13.9	7.6534	3	402	17.0	4.45
202	0.03445	82.5	2.03	0	0.4150	6.162	38.4	6.2700	2	348	14.7	7.43
203	0.02177	82.5	2.03	0	0.4150	7.610	15.7	6.2700	2	348	14.7	3.11
204	0.03510	95.0	2.68	0	0.4161	7.853	33.2	5.1180	4	224	14.7	3.81
205	0.02009	95.0	2.68	0	0.4161	8.034	31.9	5.1180	4	224	14.7	2.88
206	0.13642	0.0	10.59	0	0.4890	5.891	22.3	3.9454	4	277	18.6	10.87
207	0.22969	0.0	10.59	0	0.4890	6.326	52.5	4.3549	4	277	18.6	10.97
208	0.25199	0.0	10.59	0	0.4890	5.783	72.7	4.3549	4	277	18.6	18.06
209	0.13587	0.0	10.59	1	0.4890	6.064	59.1	4.2392	4	277	18.6	14.66
210	0.43571	0.0	10.59	1	0.4890	5.344	100.0	3.8750	4	277	18.6	23.09
211	0.17446	0.0	10.59	1	0.4890	5.960	92.1	3.8771	4	277	18.6	17.27
212	0.37578	0.0	10.59	1	0.4890	5.404	88.6	3.6650	4	277	18.6	23.98
213	0.21719	0.0	10.59	1	0.4890	5.807	53.8	3.6526	4	277	18.6	16.03
214	0.14052	0.0	10.59	0	0.4890	6.375	32.3	3.9454	4	277	18.6	9.38
215	0.28955	0.0	10.59	0	0.4890	5.412	9.8	3.5875	4	277	18.6	29.55
216	0.19802	0.0	10.59	0	0.4890	6.182	42.4	3.9454	4	277	18.6	9.47
217	0.04560	0.0	13.89	1	0.5500	5.888	56.0	3.1121	5	276	16.4	13.51
218	0.07013	0.0	13.89	0	0.5500	6.642	85.1	3.4211	5	276	16.4	9.69
219	0.11069	0.0	13.89	1	0.5500	5.951	93.8	2.8893	5	276	16.4	17.92
220	0.11425	0.0	13.89	1	0.5500	6.373	92.4	3.3633	5	276	16.4	10.50
221	0.35809	0.0	6.20	1	0.5070	6.951	88.5	2.8617	8	307	17.4	9.71
222	0.40771	0.0	6.20	1	0.5070	6.164	91.3	3.0480	8	307	17.4	21.46
223	0.62356	0.0	6.20	1	0.5070	6.879	77.7	3.2721	8	307	17.4	9.93
224	0.61470	0.0	6.20	0	0.5070	6.618	80.8	3.2721	8	307	17.4	7.60
225	0.31533	0.0	6.20	0	0.5040	8.266	78.3	2.8944	8	307	17.4	4.14
226	0.52693	0.0	6.20	0	0.5040	8.725	83.0	2.8944	8	307	17.4	4.63
227	0.38214	0.0	6.20	0	0.5040	8.040	86.5	3.2157	8	307	17.4	3.13
228	0.41238	0.0	6.20	0	0.5040	7.163	79.9	3.2157	8	307	17.4	6.36
229	0.29819	0.0	6.20	0	0.5040	7.686	17.0	3.3751	8	307	17.4	3.92
230	0.44178	0.0	6.20	0	0.5040	6.552	21.4	3.3751	8	307	17.4	3.76

231	0.53700	0.0	6.20	0	0.5040	5.981	68.1	3.6715	8	307	17.4	11.65
232	0.46296	0.0	6.20	0	0.5040	7.412	76.9	3.6715	8	307	17.4	5.25
233	0.57529	0.0	6.20	0	0.5070	8.337	73.3	3.8384	8	307	17.4	2.47
234	0.33147	0.0	6.20	0	0.5070	8.247	70.4	3.6519	8	307	17.4	3.95
235	0.44791	0.0	6.20	1	0.5070	6.726	66.5	3.6519	8	307	17.4	8.05
236	0.33045	0.0	6.20	0	0.5070	6.086	61.5	3.6519	8	307	17.4	10.88
237	0.52058	0.0	6.20	1	0.5070	6.631	76.5	4.1480	8	307	17.4	9.54
238	0.51183	0.0	6.20	0	0.5070	7.358	71.6	4.1480	8	307	17.4	4.73
239	0.08244	30.0	4.93	0	0.4280	6.481	18.5	6.1899	6	300	16.6	6.36
240	0.09252	30.0	4.93	0	0.4280	6.606	42.2	6.1899	6	300	16.6	7.37
241	0.11329	30.0	4.93	0	0.4280	6.897	54.3	6.3361	6	300	16.6	11.38
242	0.10612	30.0	4.93	0	0.4280	6.095	65.1	6.3361	6	300	16.6	12.40
243	0.10290	30.0	4.93	0	0.4280	6.358	52.9	7.0355	6	300	16.6	11.22
244	0.12757	30.0	4.93	0	0.4280	6.393	7.8	7.0355	6	300	16.6	5.19
245	0.20608	22.0	5.86	0	0.4310	5.593	76.5	7.9549	7	330	19.1	12.50
246	0.19133	22.0	5.86	0	0.4310	5.605	70.2	7.9549	7	330	19.1	18.46
247	0.33983	22.0	5.86	0	0.4310	6.108	34.9	8.0555	7	330	19.1	9.16
248	0.19657	22.0	5.86	0	0.4310	6.226	79.2	8.0555	7	330	19.1	10.15
249	0.16439	22.0	5.86	0	0.4310	6.433	49.1	7.8265	7	330	19.1	9.52
250	0.19073	22.0	5.86	0	0.4310	6.718	17.5	7.8265	7	330	19.1	6.56
251	0.14030	22.0	5.86	0	0.4310	6.487	13.0	7.3967	7	330	19.1	5.90
252	0.21409	22.0	5.86	0	0.4310	6.438	8.9	7.3967	7	330	19.1	3.59
253	0.08221	22.0	5.86	0	0.4310	6.957	6.8	8.9067	7	330	19.1	3.53
254	0.36894	22.0	5.86	0	0.4310	8.259	8.4	8.9067	7	330	19.1	3.54
255	0.04819	80.0	3.64	0	0.3920	6.108	32.0	9.2203	1	315	16.4	6.57
256	0.03548	80.0	3.64	0	0.3920	5.876	19.1	9.2203	1	315	16.4	9.25
257	0.01538	90.0	3.75	0	0.3940	7.454	34.2	6.3361	3	244	15.9	3.11
258	0.61154	20.0	3.97	0	0.6470	8.704	86.9	1.8010	5	264	13.0	5.12
259	0.66351	20.0	3.97	0	0.6470	7.333	100.0	1.8946	5	264	13.0	7.79
260	0.65665	20.0	3.97	0	0.6470	6.842	100.0	2.0107	5	264	13.0	6.90
261	0.54011	20.0	3.97	0	0.6470	7.203	81.8	2.1121	5	264	13.0	9.59
262	0.53412	20.0	3.97	0	0.6470	7.520	89.4	2.1398	5	264	13.0	7.26
263	0.52014	20.0	3.97	0	0.6470	8.398	91.5	2.2885	5	264	13.0	5.91
264	0.82526	20.0	3.97	0	0.6470	7.327	94.5	2.0788	5	264	13.0	11.25
265	0.55007	20.0	3.97	0	0.6470	7.206	91.6	1.9301	5	264	13.0	8.10
266	0.76162	20.0	3.97	0	0.6470	5.560	62.8	1.9865	5	264	13.0	10.45
267	0.78570	20.0	3.97	0	0.6470	7.014	84.6	2.1329	5	264	13.0	14.79
268	0.57834	20.0	3.97	0	0.5750	8.297	67.0	2.4216	5	264	13.0	7.44
269	0.54050	20.0	3.97	0	0.5750	7.470	52.6	2.8720	5	264	13.0	3.16
270	0.09065	20.0	6.96	1	0.4640	5.920	61.5	3.9175	3	223	18.6	13.65
271	0.29916	20.0	6.96	0	0.4640	5.856	42.1	4.4290	3	223	18.6	13.00
272	0.16211	20.0	6.96	0	0.4640	6.240	16.3	4.4290	3	223	18.6	6.59
273	0.11460	20.0	6.96	0	0.4640	6.538	58.7	3.9175	3	223	18.6	7.73

274	0.22188	20.0	6.96	1	0.4640	7.691	51.8	4.3665	3	223	18.6	6.58
275	0.05644	40.0	6.41	1	0.4470	6.758	32.9	4.0776	4	254	17.6	3.53
276	0.09604	40.0	6.41	0	0.4470	6.854	42.8	4.2673	4	254	17.6	2.98
277	0.10469	40.0	6.41	1	0.4470	7.267	49.0	4.7872	4	254	17.6	6.05
278	0.06127	40.0	6.41	1	0.4470	6.826	27.6	4.8628	4	254	17.6	4.16
279	0.07978	40.0	6.41	0	0.4470	6.482	32.1	4.1403	4	254	17.6	7.19
280	0.21038	20.0	3.33	0	0.4429	6.812	32.2	4.1007	5	216	14.9	4.85
281	0.03578	20.0	3.33	0	0.4429	7.820	64.5	4.6947	5	216	14.9	3.76
282	0.03705	20.0	3.33	0	0.4429	6.968	37.2	5.2447	5	216	14.9	4.59
283	0.06129	20.0	3.33	1	0.4429	7.645	49.7	5.2119	5	216	14.9	3.01
284	0.01501	90.0	1.21	1	0.4010	7.923	24.8	5.8850	1	198	13.6	3.16
285	0.00906	90.0	2.97	0	0.4000	7.088	20.8	7.3073	1	285	15.3	7.85
286	0.01096	55.0	2.25	0	0.3890	6.453	31.9	7.3073	1	300	15.3	8.23
287	0.01965	80.0	1.76	0	0.3850	6.230	31.5	9.0892	1	241	18.2	12.93
288	0.03871	52.5	5.32	0	0.4050	6.209	31.3	7.3172	6	293	16.6	7.14
289	0.04590	52.5	5.32	0	0.4050	6.315	45.6	7.3172	6	293	16.6	7.60
290	0.04297	52.5	5.32	0	0.4050	6.565	22.9	7.3172	6	293	16.6	9.51
291	0.03502	80.0	4.95	0	0.4110	6.861	27.9	5.1167	4	245	19.2	3.33
292	0.07886	80.0	4.95	0	0.4110	7.148	27.7	5.1167	4	245	19.2	3.56
293	0.03615	80.0	4.95	0	0.4110	6.630	23.4	5.1167	4	245	19.2	4.70
294	0.08265	0.0	13.92	0	0.4370	6.127	18.4	5.5027	4	289	16.0	8.58
295	0.08199	0.0	13.92	0	0.4370	6.009	42.3	5.5027	4	289	16.0	10.40
296	0.12932	0.0	13.92	0	0.4370	6.678	31.1	5.9604	4	289	16.0	6.27
297	0.05372	0.0	13.92	0	0.4370	6.549	51.0	5.9604	4	289	16.0	7.39
298	0.14103	0.0	13.92	0	0.4370	5.790	58.0	6.3200	4	289	16.0	15.84
299	0.06466	70.0	2.24	0	0.4000	6.345	20.1	7.8278	5	358	14.8	4.97
300	0.05561	70.0	2.24	0	0.4000	7.041	10.0	7.8278	5	358	14.8	4.74
301	0.04417	70.0	2.24	0	0.4000	6.871	47.4	7.8278	5	358	14.8	6.07
302	0.03537	34.0	6.09	0	0.4330	6.590	40.4	5.4917	7	329	16.1	9.50
303	0.09266	34.0	6.09	0	0.4330	6.495	18.4	5.4917	7	329	16.1	8.67
304	0.10000	34.0	6.09	0	0.4330	6.982	17.7	5.4917	7	329	16.1	4.86
305	0.05515	33.0	2.18	0	0.4720	7.236	41.1	4.0220	7	222	18.4	6.93
306	0.05479	33.0	2.18	0	0.4720	6.616	58.1	3.3700	7	222	18.4	8.93
307	0.07503	33.0	2.18	0	0.4720	7.420	71.9	3.0992	7	222	18.4	6.47
308	0.04932	33.0	2.18	0	0.4720	6.849	70.3	3.1827	7	222	18.4	7.53
309	0.49298	0.0	9.90	0	0.5440	6.635	82.5	3.3175	4	304	18.4	4.54
310	0.34940	0.0	9.90	0	0.5440	5.972	76.7	3.1025	4	304	18.4	9.97
311	2.63548	0.0	9.90	0	0.5440	4.973	37.8	2.5194	4	304	18.4	12.64
312	0.79041	0.0	9.90	0	0.5440	6.122	52.8	2.6403	4	304	18.4	5.98
313	0.26169	0.0	9.90	0	0.5440	6.023	90.4	2.8340	4	304	18.4	11.72
314	0.26938	0.0	9.90	0	0.5440	6.266	82.8	3.2628	4	304	18.4	7.90
315	0.36920	0.0	9.90	0	0.5440	6.567	87.3	3.6023	4	304	18.4	9.28
316	0.25356	0.0	9.90	0	0.5440	5.705	77.7	3.9450	4	304	18.4	11.50

317	0.31827	0.0	9.90	0	0.5440	5.914	83.2	3.9986	4	304	18.4	18.33
318	0.24522	0.0	9.90	0	0.5440	5.782	71.7	4.0317	4	304	18.4	15.94
319	0.40202	0.0	9.90	0	0.5440	6.382	67.2	3.5325	4	304	18.4	10.36
320	0.47547	0.0	9.90	0	0.5440	6.113	58.8	4.0019	4	304	18.4	12.73
321	0.16760	0.0	7.38	0	0.4930	6.426	52.3	4.5404	5	287	19.6	7.20
322	0.18159	0.0	7.38	0	0.4930	6.376	54.3	4.5404	5	287	19.6	6.87
323	0.35114	0.0	7.38	0	0.4930	6.041	49.9	4.7211	5	287	19.6	7.70
324	0.28392	0.0	7.38	0	0.4930	5.708	74.3	4.7211	5	287	19.6	11.74
325	0.34109	0.0	7.38	0	0.4930	6.415	40.1	4.7211	5	287	19.6	6.12
326	0.19186	0.0	7.38	0	0.4930	6.431	14.7	5.4159	5	287	19.6	5.08
327	0.30347	0.0	7.38	0	0.4930	6.312	28.9	5.4159	5	287	19.6	6.15
328	0.24103	0.0	7.38	0	0.4930	6.083	43.7	5.4159	5	287	19.6	12.79
329	0.06617	0.0	3.24	0	0.4600	5.868	25.8	5.2146	4	430	16.9	9.97
330	0.06724	0.0	3.24	0	0.4600	6.333	17.2	5.2146	4	430	16.9	7.34
331	0.04544	0.0	3.24	0	0.4600	6.144	32.2	5.8736	4	430	16.9	9.09
332	0.05023	35.0	6.06	0	0.4379	5.706	28.4	6.6407	1	304	16.9	12.43
333	0.03466	35.0	6.06	0	0.4379	6.031	23.3	6.6407	1	304	16.9	7.83
334	0.05083	0.0	5.19	0	0.5150	6.316	38.1	6.4584	5	224	20.2	5.68
335	0.03738	0.0	5.19	0	0.5150	6.310	38.5	6.4584	5	224	20.2	6.75
336	0.03961	0.0	5.19	0	0.5150	6.037	34.5	5.9853	5	224	20.2	8.01
337	0.03427	0.0	5.19	0	0.5150	5.869	46.3	5.2311	5	224	20.2	9.80
338	0.03041	0.0	5.19	0	0.5150	5.895	59.6	5.6150	5	224	20.2	10.56
339	0.03306	0.0	5.19	0	0.5150	6.059	37.3	4.8122	5	224	20.2	8.51
340	0.05497	0.0	5.19	0	0.5150	5.985	45.4	4.8122	5	224	20.2	9.74
341	0.06151	0.0	5.19	0	0.5150	5.968	58.5	4.8122	5	224	20.2	9.29
342	0.01301	35.0	1.52	0	0.4420	7.241	49.3	7.0379	1	284	15.5	5.49
343	0.02498	0.0	1.89	0	0.5180	6.540	59.7	6.2669	1	422	15.9	8.65
344	0.02543	55.0	3.78	0	0.4840	6.696	56.4	5.7321	5	370	17.6	7.18
345	0.03049	55.0	3.78	0	0.4840	6.874	28.1	6.4654	5	370	17.6	4.61
346	0.03113	0.0	4.39	0	0.4420	6.014	48.5	8.0136	3	352	18.8	10.53
347	0.06162	0.0	4.39	0	0.4420	5.898	52.3	8.0136	3	352	18.8	12.67
348	0.01870	85.0	4.15	0	0.4290	6.516	27.7	8.5353	4	351	17.9	6.36
349	0.01501	80.0	2.01	0	0.4350	6.635	29.7	8.3440	4	280	17.0	5.99
350	0.02899	40.0	1.25	0	0.4290	6.939	34.5	8.7921	1	335	19.7	5.89
351	0.06211	40.0	1.25	0	0.4290	6.490	44.4	8.7921	1	335	19.7	5.98
352	0.07950	60.0	1.69	0	0.4110	6.579	35.9	10.7103	4	411	18.3	5.49
353	0.07244	60.0	1.69	0	0.4110	5.884	18.5	10.7103	4	411	18.3	7.79
354	0.01709	90.0	2.02	0	0.4100	6.728	36.1	12.1265	5	187	17.0	4.50
355	0.04301	80.0	1.91	0	0.4130	5.663	21.9	10.5857	4	334	22.0	8.05
356	0.10659	80.0	1.91	0	0.4130	5.936	19.5	10.5857	4	334	22.0	5.57
357	8.98296	0.0	18.10	1	0.7700	6.212	97.4	2.1222	24	666	20.2	17.60
358	3.84970	0.0	18.10	1	0.7700	6.395	91.0	2.5052	24	666	20.2	13.27
359	5.20177	0.0	18.10	1	0.7700	6.127	83.4	2.7227	24	666	20.2	11.48

360	4.26131	0.0	18.10	0	0.7700	6.112	81.3	2.5091	24	666	20.2	12.67
361	4.54192	0.0	18.10	0	0.7700	6.398	88.0	2.5182	24	666	20.2	7.79
362	3.83684	0.0	18.10	0	0.7700	6.251	91.1	2.2955	24	666	20.2	14.19
363	3.67822	0.0	18.10	0	0.7700	5.362	96.2	2.1036	24	666	20.2	10.19
364	4.22239	0.0	18.10	1	0.7700	5.803	89.0	1.9047	24	666	20.2	14.64
365	3.47428	0.0	18.10	1	0.7180	8.780	82.9	1.9047	24	666	20.2	5.29
366	4.55587	0.0	18.10	0	0.7180	3.561	87.9	1.6132	24	666	20.2	7.12
367	3.69695	0.0	18.10	0	0.7180	4.963	91.4	1.7523	24	666	20.2	14.00
368	13.52220	0.0	18.10	0	0.6310	3.863	100.0	1.5106	24	666	20.2	13.33
369	4.89822	0.0	18.10	0	0.6310	4.970	100.0	1.3325	24	666	20.2	3.26
370	5.66998	0.0	18.10	1	0.6310	6.683	96.8	1.3567	24	666	20.2	3.73
371	6.53876	0.0	18.10	1	0.6310	7.016	97.5	1.2024	24	666	20.2	2.96
372	9.23230	0.0	18.10	0	0.6310	6.216	100.0	1.1691	24	666	20.2	9.53
373	8.26725	0.0	18.10	1	0.6680	5.875	89.6	1.1296	24	666	20.2	8.88
374	11.10810	0.0	18.10	0	0.6680	4.906	100.0	1.1742	24	666	20.2	34.77
375	18.49820	0.0	18.10	0	0.6680	4.138	100.0	1.1370	24	666	20.2	37.97
376	19.60910	0.0	18.10	0	0.6710	7.313	97.9	1.3163	24	666	20.2	13.44
377	15.28800	0.0	18.10	0	0.6710	6.649	93.3	1.3449	24	666	20.2	23.24
378	9.82349	0.0	18.10	0	0.6710	6.794	98.8	1.3580	24	666	20.2	21.24
379	23.64820	0.0	18.10	0	0.6710	6.380	96.2	1.3861	24	666	20.2	23.69
380	17.86670	0.0	18.10	0	0.6710	6.223	100.0	1.3861	24	666	20.2	21.78
381	88.97620	0.0	18.10	0	0.6710	6.968	91.9	1.4165	24	666	20.2	17.21
382	15.87440	0.0	18.10	0	0.6710	6.545	99.1	1.5192	24	666	20.2	21.08
383	9.18702	0.0	18.10	0	0.7000	5.536	100.0	1.5804	24	666	20.2	23.60
384	7.99248	0.0	18.10	0	0.7000	5.520	100.0	1.5331	24	666	20.2	24.56
385	20.08490	0.0	18.10	0	0.7000	4.368	91.2	1.4395	24	666	20.2	30.63
386	16.81180	0.0	18.10	0	0.7000	5.277	98.1	1.4261	24	666	20.2	30.81
387	24.39380	0.0	18.10	0	0.7000	4.652	100.0	1.4672	24	666	20.2	28.28
388	22.59710	0.0	18.10	0	0.7000	5.000	89.5	1.5184	24	666	20.2	31.99
389	14.33370	0.0	18.10	0	0.7000	4.880	100.0	1.5895	24	666	20.2	30.62
390	8.15174	0.0	18.10	0	0.7000	5.390	98.9	1.7281	24	666	20.2	20.85
391	6.96215	0.0	18.10	0	0.7000	5.713	97.0	1.9265	24	666	20.2	17.11
392	5.29305	0.0	18.10	0	0.7000	6.051	82.5	2.1678	24	666	20.2	18.76
393	11.57790	0.0	18.10	0	0.7000	5.036	97.0	1.7700	24	666	20.2	25.68
394	8.64476	0.0	18.10	0	0.6930	6.193	92.6	1.7912	24	666	20.2	15.17
395	13.35980	0.0	18.10	0	0.6930	5.887	94.7	1.7821	24	666	20.2	16.35
396	8.71675	0.0	18.10	0	0.6930	6.471	98.8	1.7257	24	666	20.2	17.12
397	5.87205	0.0	18.10	0	0.6930	6.405	96.0	1.6768	24	666	20.2	19.37
398	7.67202	0.0	18.10	0	0.6930	5.747	98.9	1.6334	24	666	20.2	19.92
399	38.35180	0.0	18.10	0	0.6930	5.453	100.0	1.4896	24	666	20.2	30.59
400	9.91655	0.0	18.10	0	0.6930	5.852	77.8	1.5004	24	666	20.2	29.97
401	25.04610	0.0	18.10	0	0.6930	5.987	100.0	1.5888	24	666	20.2	26.77
402	14.23620	0.0	18.10	0	0.6930	6.343	100.0	1.5741	24	666	20.2	20.32

403	9.59571	0.0	18.10	0	0.6930	6.404	100.0	1.6390	24	666	20.2	20.31
404	24.80170	0.0	18.10	0	0.6930	5.349	96.0	1.7028	24	666	20.2	19.77
405	41.52920	0.0	18.10	0	0.6930	5.531	85.4	1.6074	24	666	20.2	27.38
406	67.92080	0.0	18.10	0	0.6930	5.683	100.0	1.4254	24	666	20.2	22.98
407	20.71620	0.0	18.10	0	0.6590	4.138	100.0	1.1781	24	666	20.2	23.34
408	11.95110	0.0	18.10	0	0.6590	5.608	100.0	1.2852	24	666	20.2	12.13
409	7.40389	0.0	18.10	0	0.5970	5.617	97.9	1.4547	24	666	20.2	26.40
410	14.43830	0.0	18.10	0	0.5970	6.852	100.0	1.4655	24	666	20.2	19.78
411	51.13580	0.0	18.10	0	0.5970	5.757	100.0	1.4130	24	666	20.2	10.11
412	14.05070	0.0	18.10	0	0.5970	6.657	100.0	1.5275	24	666	20.2	21.22
413	18.81100	0.0	18.10	0	0.5970	4.628	100.0	1.5539	24	666	20.2	34.37
414	28.65580	0.0	18.10	0	0.5970	5.155	100.0	1.5894	24	666	20.2	20.08
415	45.74610	0.0	18.10	0	0.6930	4.519	100.0	1.6582	24	666	20.2	36.98
416	18.08460	0.0	18.10	0	0.6790	6.434	100.0	1.8347	24	666	20.2	29.05
417	10.83420	0.0	18.10	0	0.6790	6.782	90.8	1.8195	24	666	20.2	25.79
418	25.94060	0.0	18.10	0	0.6790	5.304	89.1	1.6475	24	666	20.2	26.64
419	73.53410	0.0	18.10	0	0.6790	5.957	100.0	1.8026	24	666	20.2	20.62
420	11.81230	0.0	18.10	0	0.7180	6.824	76.5	1.7940	24	666	20.2	22.74
421	11.08740	0.0	18.10	0	0.7180	6.411	100.0	1.8589	24	666	20.2	15.02
422	7.02259	0.0	18.10	0	0.7180	6.006	95.3	1.8746	24	666	20.2	15.70
423	12.04820	0.0	18.10	0	0.6140	5.648	87.6	1.9512	24	666	20.2	14.10
424	7.05042	0.0	18.10	0	0.6140	6.103	85.1	2.0218	24	666	20.2	23.29
425	8.79212	0.0	18.10	0	0.5840	5.565	70.6	2.0635	24	666	20.2	17.16
426	15.86030	0.0	18.10	0	0.6790	5.896	95.4	1.9096	24	666	20.2	24.39
427	12.24720	0.0	18.10	0	0.5840	5.837	59.7	1.9976	24	666	20.2	15.69
428	37.66190	0.0	18.10	0	0.6790	6.202	78.7	1.8629	24	666	20.2	14.52
429	7.36711	0.0	18.10	0	0.6790	6.193	78.1	1.9356	24	666	20.2	21.52
430	9.33889	0.0	18.10	0	0.6790	6.380	95.6	1.9682	24	666	20.2	24.08
431	8.49213	0.0	18.10	0	0.5840	6.348	86.1	2.0527	24	666	20.2	17.64
432	10.06230	0.0	18.10	0	0.5840	6.833	94.3	2.0882	24	666	20.2	19.69
433	6.44405	0.0	18.10	0	0.5840	6.425	74.8	2.2004	24	666	20.2	12.03
434	5.58107	0.0	18.10	0	0.7130	6.436	87.9	2.3158	24	666	20.2	16.22
435	13.91340	0.0	18.10	0	0.7130	6.208	95.0	2.2222	24	666	20.2	15.17
436	11.16040	0.0	18.10	0	0.7400	6.629	94.6	2.1247	24	666	20.2	23.27
437	14.42080	0.0	18.10	0	0.7400	6.461	93.3	2.0026	24	666	20.2	18.05
438	15.17720	0.0	18.10	0	0.7400	6.152	100.0	1.9142	24	666	20.2	26.45
439	13.67810	0.0	18.10	0	0.7400	5.935	87.9	1.8206	24	666	20.2	34.02
440	9.39063	0.0	18.10	0	0.7400	5.627	93.9	1.8172	24	666	20.2	22.88
441	22.05110	0.0	18.10	0	0.7400	5.818	92.4	1.8662	24	666	20.2	22.11
442	9.72418	0.0	18.10	0	0.7400	6.406	97.2	2.0651	24	666	20.2	19.52
443	5.66637	0.0	18.10	0	0.7400	6.219	100.0	2.0048	24	666	20.2	16.59
444	9.96654	0.0	18.10	0	0.7400	6.485	100.0	1.9784	24	666	20.2	18.85
445	12.80230	0.0	18.10	0	0.7400	5.854	96.6	1.8956	24	666	20.2	23.79

446	10.67180	0.0	18.10	0	0.7400	6.459	94.8	1.9879	24	666	20.2	23.98
447	6.28807	0.0	18.10	0	0.7400	6.341	96.4	2.0720	24	666	20.2	17.79
448	9.92485	0.0	18.10	0	0.7400	6.251	96.6	2.1980	24	666	20.2	16.44
449	9.32909	0.0	18.10	0	0.7130	6.185	98.7	2.2616	24	666	20.2	18.13
450	7.52601	0.0	18.10	0	0.7130	6.417	98.3	2.1850	24	666	20.2	19.31
451	6.71772	0.0	18.10	0	0.7130	6.749	92.6	2.3236	24	666	20.2	17.44
452	5.44114	0.0	18.10	0	0.7130	6.655	98.2	2.3552	24	666	20.2	17.73
453	5.09017	0.0	18.10	0	0.7130	6.297	91.8	2.3682	24	666	20.2	17.27
454	8.24809	0.0	18.10	0	0.7130	7.393	99.3	2.4527	24	666	20.2	16.74
455	9.51363	0.0	18.10	0	0.7130	6.728	94.1	2.4961	24	666	20.2	18.71
456	4.75237	0.0	18.10	0	0.7130	6.525	86.5	2.4358	24	666	20.2	18.13
457	4.66883	0.0	18.10	0	0.7130	5.976	87.9	2.5806	24	666	20.2	19.01
458	8.20058	0.0	18.10	0	0.7130	5.936	80.3	2.7792	24	666	20.2	16.94
459	7.75223	0.0	18.10	0	0.7130	6.301	83.7	2.7831	24	666	20.2	16.23
460	6.80117	0.0	18.10	0	0.7130	6.081	84.4	2.7175	24	666	20.2	14.70
461	4.81213	0.0	18.10	0	0.7130	6.701	90.0	2.5975	24	666	20.2	16.42
462	3.69311	0.0	18.10	0	0.7130	6.376	88.4	2.5671	24	666	20.2	14.65
463	6.65492	0.0	18.10	0	0.7130	6.317	83.0	2.7344	24	666	20.2	13.99
464	5.82115	0.0	18.10	0	0.7130	6.513	89.9	2.8016	24	666	20.2	10.29
465	7.83932	0.0	18.10	0	0.6550	6.209	65.4	2.9634	24	666	20.2	13.22
466	3.16360	0.0	18.10	0	0.6550	5.759	48.2	3.0665	24	666	20.2	14.13
467	3.77498	0.0	18.10	0	0.6550	5.952	84.7	2.8715	24	666	20.2	17.15
468	4.42228	0.0	18.10	0	0.5840	6.003	94.5	2.5403	24	666	20.2	21.32
469	15.57570	0.0	18.10	0	0.5800	5.926	71.0	2.9084	24	666	20.2	18.13
470	13.07510	0.0	18.10	0	0.5800	5.713	56.7	2.8237	24	666	20.2	14.76
471	4.34879	0.0	18.10	0	0.5800	6.167	84.0	3.0334	24	666	20.2	16.29
472	4.03841	0.0	18.10	0	0.5320	6.229	90.7	3.0993	24	666	20.2	12.87
473	3.56868	0.0	18.10	0	0.5800	6.437	75.0	2.8965	24	666	20.2	14.36
474	4.64689	0.0	18.10	0	0.6140	6.980	67.6	2.5329	24	666	20.2	11.66
475	8.05579	0.0	18.10	0	0.5840	5.427	95.4	2.4298	24	666	20.2	18.14
476	6.39312	0.0	18.10	0	0.5840	6.162	97.4	2.2060	24	666	20.2	24.10
477	4.87141	0.0	18.10	0	0.6140	6.484	93.6	2.3053	24	666	20.2	18.68
478	15.02340	0.0	18.10	0	0.6140	5.304	97.3	2.1007	24	666	20.2	24.91
479	10.23300	0.0	18.10	0	0.6140	6.185	96.7	2.1705	24	666	20.2	18.03
480	14.33370	0.0	18.10	0	0.6140	6.229	88.0	1.9512	24	666	20.2	13.11
481	5.82401	0.0	18.10	0	0.5320	6.242	64.7	3.4242	24	666	20.2	10.74
482	5.70818	0.0	18.10	0	0.5320	6.750	74.9	3.3317	24	666	20.2	7.74
483	5.73116	0.0	18.10	0	0.5320	7.061	77.0	3.4106	24	666	20.2	7.01
484	2.81838	0.0	18.10	0	0.5320	5.762	40.3	4.0983	24	666	20.2	10.42
485	2.37857	0.0	18.10	0	0.5830	5.871	41.9	3.7240	24	666	20.2	13.34
486	3.67367	0.0	18.10	0	0.5830	6.312	51.9	3.9917	24	666	20.2	10.58
487	5.69175	0.0	18.10	0	0.5830	6.114	79.8	3.5459	24	666	20.2	14.98
488	4.83567	0.0	18.10	0	0.5830	5.905	53.2	3.1523	24	666	20.2	11.45

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490  0.18337   0.0 27.74    0 0.6090 5.414  98.3  1.7554   4 711    20.1 23.97
491  0.20746   0.0 27.74    0 0.6090 5.093  98.0  1.8226   4 711    20.1 29.68
492  0.10574   0.0 27.74    0 0.6090 5.983  98.8  1.8681   4 711    20.1 18.07
493  0.11132   0.0 27.74    0 0.6090 5.983  83.5  2.1099   4 711    20.1 13.35
494  0.17331   0.0  9.69    0 0.5850 5.707  54.0  2.3817   6 391    19.2 12.01
495  0.27957   0.0  9.69    0 0.5850 5.926  42.6  2.3817   6 391    19.2 13.59
496  0.17899   0.0  9.69    0 0.5850 5.670  28.8  2.7986   6 391    19.2 17.60
497  0.28960   0.0  9.69    0 0.5850 5.390  72.9  2.7986   6 391    19.2 21.14
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499  0.23912   0.0  9.69    0 0.5850 6.019  65.3  2.4091   6 391    19.2 12.92
500  0.17783   0.0  9.69    0 0.5850 5.569  73.5  2.3999   6 391    19.2 15.10
501  0.22438   0.0  9.69    0 0.5850 6.027  79.7  2.4982   6 391    19.2 14.33
502  0.06263   0.0 11.93    0 0.5730 6.593  69.1  2.4786   1 273    21.0  9.67
503  0.04527   0.0 11.93    0 0.5730 6.120  76.7  2.2875   1 273    21.0  9.08
504  0.06076   0.0 11.93    0 0.5730 6.976  91.0  2.1675   1 273    21.0  5.64
505  0.10959   0.0 11.93    0 0.5730 6.794  89.3  2.3889   1 273    21.0  6.48
506  0.04741   0.0 11.93    0 0.5730 6.030  80.8  2.5050   1 273    21.0  7.88
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[[4]]
[[4]]$train
        crim    zn indus chas    nox    rm   age     dis rad tax ptratio lstat
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2    0.02731   0.0  7.07    0 0.4690 6.421  78.9  4.9671   2 242    17.8  9.14
3    0.02729   0.0  7.07    0 0.4690 7.185  61.1  4.9671   2 242    17.8  4.03
4    0.03237   0.0  2.18    0 0.4580 6.998  45.8  6.0622   3 222    18.7  2.94
5    0.06905   0.0  2.18    0 0.4580 7.147  54.2  6.0622   3 222    18.7  5.33
6    0.02985   0.0  2.18    0 0.4580 6.430  58.7  6.0622   3 222    18.7  5.21
7    0.08829  12.5  7.87    0 0.5240 6.012  66.6  5.5605   5 311    15.2 12.43
8    0.14455  12.5  7.87    0 0.5240 6.172  96.1  5.9505   5 311    15.2 19.15
9    0.21124  12.5  7.87    0 0.5240 5.631 100.0  6.0821   5 311    15.2 29.93
10   0.17004  12.5  7.87    0 0.5240 6.004  85.9  6.5921   5 311    15.2 17.10
11   0.22489  12.5  7.87    0 0.5240 6.377  94.3  6.3467   5 311    15.2 20.45
12   0.11747  12.5  7.87    0 0.5240 6.009  82.9  6.2267   5 311    15.2 13.27
13   0.09378  12.5  7.87    0 0.5240 5.889  39.0  5.4509   5 311    15.2 15.71
14   0.62976   0.0  8.14    0 0.5380 5.949  61.8  4.7075   4 307    21.0  8.26
15   0.63796   0.0  8.14    0 0.5380 6.096  84.5  4.4619   4 307    21.0 10.26
16   0.62739   0.0  8.14    0 0.5380 5.834  56.5  4.4986   4 307    21.0  8.47
17   1.05393   0.0  8.14    0 0.5380 5.935  29.3  4.4986   4 307    21.0  6.58
18   0.78420   0.0  8.14    0 0.5380 5.990  81.7  4.2579   4 307    21.0 14.67
19   0.80271   0.0  8.14    0 0.5380 5.456  36.6  3.7965   4 307    21.0 11.69
20   0.72580   0.0  8.14    0 0.5380 5.727  69.5  3.7965   4 307    21.0 11.28
21   1.25179   0.0  8.14    0 0.5380 5.570  98.1  3.7979   4 307    21.0 21.02
22   0.85204   0.0  8.14    0 0.5380 5.965  89.2  4.0123   4 307    21.0 13.83
23   1.23247   0.0  8.14    0 0.5380 6.142  91.7  3.9769   4 307    21.0 18.72
24   0.98843   0.0  8.14    0 0.5380 5.813 100.0  4.0952   4 307    21.0 19.88
25   0.75026   0.0  8.14    0 0.5380 5.924  94.1  4.3996   4 307    21.0 16.30
26   0.84054   0.0  8.14    0 0.5380 5.599  85.7  4.4546   4 307    21.0 16.51
27   0.67191   0.0  8.14    0 0.5380 5.813  90.3  4.6820   4 307    21.0 14.81
28   0.95577   0.0  8.14    0 0.5380 6.047  88.8  4.4534   4 307    21.0 17.28
29   0.77299   0.0  8.14    0 0.5380 6.495  94.4  4.4547   4 307    21.0 12.80
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31	1.13081	0.0	8.14	0	0.5380	5.713	94.1	4.2330	4	307	21.0	22.60
32	1.35472	0.0	8.14	0	0.5380	6.072	100.0	4.1750	4	307	21.0	13.04
33	1.38799	0.0	8.14	0	0.5380	5.950	82.0	3.9900	4	307	21.0	27.71
34	1.15172	0.0	8.14	0	0.5380	5.701	95.0	3.7872	4	307	21.0	18.35
35	1.61282	0.0	8.14	0	0.5380	6.096	96.9	3.7598	4	307	21.0	20.34
36	0.06417	0.0	5.96	0	0.4990	5.933	68.2	3.3603	5	279	19.2	9.68
37	0.09744	0.0	5.96	0	0.4990	5.841	61.4	3.3779	5	279	19.2	11.41
38	0.08014	0.0	5.96	0	0.4990	5.850	41.5	3.9342	5	279	19.2	8.77
39	0.17505	0.0	5.96	0	0.4990	5.966	30.2	3.8473	5	279	19.2	10.13
40	0.02763	75.0	2.95	0	0.4280	6.595	21.8	5.4011	3	252	18.3	4.32
41	0.03359	75.0	2.95	0	0.4280	7.024	15.8	5.4011	3	252	18.3	1.98
42	0.12744	0.0	6.91	0	0.4480	6.770	2.9	5.7209	3	233	17.9	4.84
43	0.14150	0.0	6.91	0	0.4480	6.169	6.6	5.7209	3	233	17.9	5.81
44	0.15936	0.0	6.91	0	0.4480	6.211	6.5	5.7209	3	233	17.9	7.44
45	0.12269	0.0	6.91	0	0.4480	6.069	40.0	5.7209	3	233	17.9	9.55
46	0.17142	0.0	6.91	0	0.4480	5.682	33.8	5.1004	3	233	17.9	10.21
47	0.18836	0.0	6.91	0	0.4480	5.786	33.3	5.1004	3	233	17.9	14.15
48	0.22927	0.0	6.91	0	0.4480	6.030	85.5	5.6894	3	233	17.9	18.80
49	0.25387	0.0	6.91	0	0.4480	5.399	95.3	5.8700	3	233	17.9	30.81
50	0.21977	0.0	6.91	0	0.4480	5.602	62.0	6.0877	3	233	17.9	16.20
51	0.08873	21.0	5.64	0	0.4390	5.963	45.7	6.8147	4	243	16.8	13.45
52	0.04337	21.0	5.64	0	0.4390	6.115	63.0	6.8147	4	243	16.8	9.43
53	0.05360	21.0	5.64	0	0.4390	6.511	21.1	6.8147	4	243	16.8	5.28
54	0.04981	21.0	5.64	0	0.4390	5.998	21.4	6.8147	4	243	16.8	8.43
55	0.01360	75.0	4.00	0	0.4100	5.888	47.6	7.3197	3	469	21.1	14.80
56	0.01311	90.0	1.22	0	0.4030	7.249	21.9	8.6966	5	226	17.9	4.81
57	0.02055	85.0	0.74	0	0.4100	6.383	35.7	9.1876	2	313	17.3	5.77
58	0.01432	100.0	1.32	0	0.4110	6.816	40.5	8.3248	5	256	15.1	3.95
59	0.15445	25.0	5.13	0	0.4530	6.145	29.2	7.8148	8	284	19.7	6.86
60	0.10328	25.0	5.13	0	0.4530	5.927	47.2	6.9320	8	284	19.7	9.22
61	0.14932	25.0	5.13	0	0.4530	5.741	66.2	7.2254	8	284	19.7	13.15
62	0.17171	25.0	5.13	0	0.4530	5.966	93.4	6.8185	8	284	19.7	14.44
63	0.11027	25.0	5.13	0	0.4530	6.456	67.8	7.2255	8	284	19.7	6.73
64	0.12650	25.0	5.13	0	0.4530	6.762	43.4	7.9809	8	284	19.7	9.50
65	0.01951	17.5	1.38	0	0.4161	7.104	59.5	9.2229	3	216	18.6	8.05
66	0.03584	80.0	3.37	0	0.3980	6.290	17.8	6.6115	4	337	16.1	4.67
67	0.04379	80.0	3.37	0	0.3980	5.787	31.1	6.6115	4	337	16.1	10.24
68	0.05789	12.5	6.07	0	0.4090	5.878	21.4	6.4980	4	345	18.9	8.10
69	0.13554	12.5	6.07	0	0.4090	5.594	36.8	6.4980	4	345	18.9	13.09
70	0.12816	12.5	6.07	0	0.4090	5.885	33.0	6.4980	4	345	18.9	8.79
71	0.08826	0.0	10.81	0	0.4130	6.417	6.6	5.2873	4	305	19.2	6.72
72	0.15876	0.0	10.81	0	0.4130	5.961	17.5	5.2873	4	305	19.2	9.88

73	0.09164	0.0	10.81	0	0.4130	6.065	7.8	5.2873	4	305	19.2	5.52
74	0.19539	0.0	10.81	0	0.4130	6.245	6.2	5.2873	4	305	19.2	7.54
75	0.07896	0.0	12.83	0	0.4370	6.273	6.0	4.2515	5	398	18.7	6.78
76	0.09512	0.0	12.83	0	0.4370	6.286	45.0	4.5026	5	398	18.7	8.94
77	0.10153	0.0	12.83	0	0.4370	6.279	74.5	4.0522	5	398	18.7	11.97
78	0.08707	0.0	12.83	0	0.4370	6.140	45.8	4.0905	5	398	18.7	10.27
79	0.05646	0.0	12.83	0	0.4370	6.232	53.7	5.0141	5	398	18.7	12.34
80	0.08387	0.0	12.83	0	0.4370	5.874	36.6	4.5026	5	398	18.7	9.10
81	0.04113	25.0	4.86	0	0.4260	6.727	33.5	5.4007	4	281	19.0	5.29
82	0.04462	25.0	4.86	0	0.4260	6.619	70.4	5.4007	4	281	19.0	7.22
83	0.03659	25.0	4.86	0	0.4260	6.302	32.2	5.4007	4	281	19.0	6.72
84	0.03551	25.0	4.86	0	0.4260	6.167	46.7	5.4007	4	281	19.0	7.51
85	0.05059	0.0	4.49	0	0.4490	6.389	48.0	4.7794	3	247	18.5	9.62
86	0.05735	0.0	4.49	0	0.4490	6.630	56.1	4.4377	3	247	18.5	6.53
87	0.05188	0.0	4.49	0	0.4490	6.015	45.1	4.4272	3	247	18.5	12.86
88	0.07151	0.0	4.49	0	0.4490	6.121	56.8	3.7476	3	247	18.5	8.44
89	0.05660	0.0	3.41	0	0.4890	7.007	86.3	3.4217	2	270	17.8	5.50
90	0.05302	0.0	3.41	0	0.4890	7.079	63.1	3.4145	2	270	17.8	5.70
91	0.04684	0.0	3.41	0	0.4890	6.417	66.1	3.0923	2	270	17.8	8.81
92	0.03932	0.0	3.41	0	0.4890	6.405	73.9	3.0921	2	270	17.8	8.20
93	0.04203	28.0	15.04	0	0.4640	6.442	53.6	3.6659	4	270	18.2	8.16
94	0.02875	28.0	15.04	0	0.4640	6.211	28.9	3.6659	4	270	18.2	6.21
95	0.04294	28.0	15.04	0	0.4640	6.249	77.3	3.6150	4	270	18.2	10.59
96	0.12204	0.0	2.89	0	0.4450	6.625	57.8	3.4952	2	276	18.0	6.65
97	0.11504	0.0	2.89	0	0.4450	6.163	69.6	3.4952	2	276	18.0	11.34
98	0.12083	0.0	2.89	0	0.4450	8.069	76.0	3.4952	2	276	18.0	4.21
99	0.08187	0.0	2.89	0	0.4450	7.820	36.9	3.4952	2	276	18.0	3.57
100	0.06860	0.0	2.89	0	0.4450	7.416	62.5	3.4952	2	276	18.0	6.19
101	0.14866	0.0	8.56	0	0.5200	6.727	79.9	2.7778	5	384	20.9	9.42
102	0.11432	0.0	8.56	0	0.5200	6.781	71.3	2.8561	5	384	20.9	7.67
103	0.22876	0.0	8.56	0	0.5200	6.405	85.4	2.7147	5	384	20.9	10.63
104	0.21161	0.0	8.56	0	0.5200	6.137	87.4	2.7147	5	384	20.9	13.44
105	0.13960	0.0	8.56	0	0.5200	6.167	90.0	2.4210	5	384	20.9	12.33
106	0.13262	0.0	8.56	0	0.5200	5.851	96.7	2.1069	5	384	20.9	16.47
107	0.17120	0.0	8.56	0	0.5200	5.836	91.9	2.2110	5	384	20.9	18.66
108	0.13117	0.0	8.56	0	0.5200	6.127	85.2	2.1224	5	384	20.9	14.09
109	0.12802	0.0	8.56	0	0.5200	6.474	97.1	2.4329	5	384	20.9	12.27
110	0.26363	0.0	8.56	0	0.5200	6.229	91.2	2.5451	5	384	20.9	15.55
111	0.10793	0.0	8.56	0	0.5200	6.195	54.4	2.7778	5	384	20.9	13.00
112	0.10084	0.0	10.01	0	0.5470	6.715	81.6	2.6775	6	432	17.8	10.16
113	0.12329	0.0	10.01	0	0.5470	5.913	92.9	2.3534	6	432	17.8	16.21
114	0.22212	0.0	10.01	0	0.5470	6.092	95.4	2.5480	6	432	17.8	17.09
115	0.14231	0.0	10.01	0	0.5470	6.254	84.2	2.2565	6	432	17.8	10.45

116	0.17134	0.0	10.01	0	0.5470	5.928	88.2	2.4631	6	432	17.8	15.76
117	0.13158	0.0	10.01	0	0.5470	6.176	72.5	2.7301	6	432	17.8	12.04
118	0.15098	0.0	10.01	0	0.5470	6.021	82.6	2.7474	6	432	17.8	10.30
119	0.13058	0.0	10.01	0	0.5470	5.872	73.1	2.4775	6	432	17.8	15.37
120	0.14476	0.0	10.01	0	0.5470	5.731	65.2	2.7592	6	432	17.8	13.61
121	0.06899	0.0	25.65	0	0.5810	5.870	69.7	2.2577	2	188	19.1	14.37
122	0.07165	0.0	25.65	0	0.5810	6.004	84.1	2.1974	2	188	19.1	14.27
123	0.09299	0.0	25.65	0	0.5810	5.961	92.9	2.0869	2	188	19.1	17.93
124	0.15038	0.0	25.65	0	0.5810	5.856	97.0	1.9444	2	188	19.1	25.41
125	0.09849	0.0	25.65	0	0.5810	5.879	95.8	2.0063	2	188	19.1	17.58
126	0.16902	0.0	25.65	0	0.5810	5.986	88.4	1.9929	2	188	19.1	14.81
127	0.38735	0.0	25.65	0	0.5810	5.613	95.6	1.7572	2	188	19.1	27.26
128	0.25915	0.0	21.89	0	0.6240	5.693	96.0	1.7883	4	437	21.2	17.19
129	0.32543	0.0	21.89	0	0.6240	6.431	98.8	1.8125	4	437	21.2	15.39
130	0.88125	0.0	21.89	0	0.6240	5.637	94.7	1.9799	4	437	21.2	18.34
131	0.34006	0.0	21.89	0	0.6240	6.458	98.9	2.1185	4	437	21.2	12.60
132	1.19294	0.0	21.89	0	0.6240	6.326	97.7	2.2710	4	437	21.2	12.26
133	0.59005	0.0	21.89	0	0.6240	6.372	97.9	2.3274	4	437	21.2	11.12
134	0.32982	0.0	21.89	0	0.6240	5.822	95.4	2.4699	4	437	21.2	15.03
135	0.97617	0.0	21.89	0	0.6240	5.757	98.4	2.3460	4	437	21.2	17.31
136	0.55778	0.0	21.89	0	0.6240	6.335	98.2	2.1107	4	437	21.2	16.96
137	0.32264	0.0	21.89	0	0.6240	5.942	93.5	1.9669	4	437	21.2	16.90
138	0.35233	0.0	21.89	0	0.6240	6.454	98.4	1.8498	4	437	21.2	14.59
139	0.24980	0.0	21.89	0	0.6240	5.857	98.2	1.6686	4	437	21.2	21.32
140	0.54452	0.0	21.89	0	0.6240	6.151	97.9	1.6687	4	437	21.2	18.46
141	0.29090	0.0	21.89	0	0.6240	6.174	93.6	1.6119	4	437	21.2	24.16
142	1.62864	0.0	21.89	0	0.6240	5.019	100.0	1.4394	4	437	21.2	34.41
143	3.32105	0.0	19.58	1	0.8710	5.403	100.0	1.3216	5	403	14.7	26.82
144	4.09740	0.0	19.58	0	0.8710	5.468	100.0	1.4118	5	403	14.7	26.42
145	2.77974	0.0	19.58	0	0.8710	4.903	97.8	1.3459	5	403	14.7	29.29
146	2.37934	0.0	19.58	0	0.8710	6.130	100.0	1.4191	5	403	14.7	27.80
147	2.15505	0.0	19.58	0	0.8710	5.628	100.0	1.5166	5	403	14.7	16.65
148	2.36862	0.0	19.58	0	0.8710	4.926	95.7	1.4608	5	403	14.7	29.53
149	2.33099	0.0	19.58	0	0.8710	5.186	93.8	1.5296	5	403	14.7	28.32
150	2.73397	0.0	19.58	0	0.8710	5.597	94.9	1.5257	5	403	14.7	21.45
151	1.65660	0.0	19.58	0	0.8710	6.122	97.3	1.6180	5	403	14.7	14.10
152	1.49632	0.0	19.58	0	0.8710	5.404	100.0	1.5916	5	403	14.7	13.28
153	1.12658	0.0	19.58	1	0.8710	5.012	88.0	1.6102	5	403	14.7	12.12
154	2.14918	0.0	19.58	0	0.8710	5.709	98.5	1.6232	5	403	14.7	15.79
155	1.41385	0.0	19.58	1	0.8710	6.129	96.0	1.7494	5	403	14.7	15.12
156	3.53501	0.0	19.58	1	0.8710	6.152	82.6	1.7455	5	403	14.7	15.02
157	2.44668	0.0	19.58	0	0.8710	5.272	94.0	1.7364	5	403	14.7	16.14
158	1.22358	0.0	19.58	0	0.6050	6.943	97.4	1.8773	5	403	14.7	4.59

159	1.34284	0.0	19.58	0	0.6050	6.066	100.0	1.7573	5	403	14.7	6.43
160	1.42502	0.0	19.58	0	0.8710	6.510	100.0	1.7659	5	403	14.7	7.39
161	1.27346	0.0	19.58	1	0.6050	6.250	92.6	1.7984	5	403	14.7	5.50
162	1.46336	0.0	19.58	0	0.6050	7.489	90.8	1.9709	5	403	14.7	1.73
163	1.83377	0.0	19.58	1	0.6050	7.802	98.2	2.0407	5	403	14.7	1.92
164	1.51902	0.0	19.58	1	0.6050	8.375	93.9	2.1620	5	403	14.7	3.32
165	2.24236	0.0	19.58	0	0.6050	5.854	91.8	2.4220	5	403	14.7	11.64
166	2.92400	0.0	19.58	0	0.6050	6.101	93.0	2.2834	5	403	14.7	9.81
167	2.01019	0.0	19.58	0	0.6050	7.929	96.2	2.0459	5	403	14.7	3.70
168	1.80028	0.0	19.58	0	0.6050	5.877	79.2	2.4259	5	403	14.7	12.14
169	2.30040	0.0	19.58	0	0.6050	6.319	96.1	2.1000	5	403	14.7	11.10
170	2.44953	0.0	19.58	0	0.6050	6.402	95.2	2.2625	5	403	14.7	11.32
171	1.20742	0.0	19.58	0	0.6050	5.875	94.6	2.4259	5	403	14.7	14.43
172	2.31390	0.0	19.58	0	0.6050	5.880	97.3	2.3887	5	403	14.7	12.03
173	0.13914	0.0	4.05	0	0.5100	5.572	88.5	2.5961	5	296	16.6	14.69
174	0.09178	0.0	4.05	0	0.5100	6.416	84.1	2.6463	5	296	16.6	9.04
175	0.08447	0.0	4.05	0	0.5100	5.859	68.7	2.7019	5	296	16.6	9.64
176	0.06664	0.0	4.05	0	0.5100	6.546	33.1	3.1323	5	296	16.6	5.33
177	0.07022	0.0	4.05	0	0.5100	6.020	47.2	3.5549	5	296	16.6	10.11
178	0.05425	0.0	4.05	0	0.5100	6.315	73.4	3.3175	5	296	16.6	6.29
179	0.06642	0.0	4.05	0	0.5100	6.860	74.4	2.9153	5	296	16.6	6.92
180	0.05780	0.0	2.46	0	0.4880	6.980	58.4	2.8290	3	193	17.8	5.04
181	0.06588	0.0	2.46	0	0.4880	7.765	83.3	2.7410	3	193	17.8	7.56
182	0.06888	0.0	2.46	0	0.4880	6.144	62.2	2.5979	3	193	17.8	9.45
183	0.09103	0.0	2.46	0	0.4880	7.155	92.2	2.7006	3	193	17.8	4.82
184	0.10008	0.0	2.46	0	0.4880	6.563	95.6	2.8470	3	193	17.8	5.68
185	0.08308	0.0	2.46	0	0.4880	5.604	89.8	2.9879	3	193	17.8	13.98
186	0.06047	0.0	2.46	0	0.4880	6.153	68.8	3.2797	3	193	17.8	13.15
187	0.05602	0.0	2.46	0	0.4880	7.831	53.6	3.1992	3	193	17.8	4.45
188	0.07875	45.0	3.44	0	0.4370	6.782	41.1	3.7886	5	398	15.2	6.68
189	0.12579	45.0	3.44	0	0.4370	6.556	29.1	4.5667	5	398	15.2	4.56
190	0.08370	45.0	3.44	0	0.4370	7.185	38.9	4.5667	5	398	15.2	5.39
191	0.09068	45.0	3.44	0	0.4370	6.951	21.5	6.4798	5	398	15.2	5.10
192	0.06911	45.0	3.44	0	0.4370	6.739	30.8	6.4798	5	398	15.2	4.69
193	0.08664	45.0	3.44	0	0.4370	7.178	26.3	6.4798	5	398	15.2	2.87
194	0.02187	60.0	2.93	0	0.4010	6.800	9.9	6.2196	1	265	15.6	5.03
195	0.01439	60.0	2.93	0	0.4010	6.604	18.8	6.2196	1	265	15.6	4.38
196	0.01381	80.0	0.46	0	0.4220	7.875	32.0	5.6484	4	255	14.4	2.97
197	0.04011	80.0	1.52	0	0.4040	7.287	34.1	7.3090	2	329	12.6	4.08
198	0.04666	80.0	1.52	0	0.4040	7.107	36.6	7.3090	2	329	12.6	8.61
199	0.03768	80.0	1.52	0	0.4040	7.274	38.3	7.3090	2	329	12.6	6.62
200	0.03150	95.0	1.47	0	0.4030	6.975	15.3	7.6534	3	402	17.0	4.56
201	0.01778	95.0	1.47	0	0.4030	7.135	13.9	7.6534	3	402	17.0	4.45

202	0.03445	82.5	2.03	0	0.4150	6.162	38.4	6.2700	2	348	14.7	7.43
203	0.02177	82.5	2.03	0	0.4150	7.610	15.7	6.2700	2	348	14.7	3.11
204	0.03510	95.0	2.68	0	0.4161	7.853	33.2	5.1180	4	224	14.7	3.81
205	0.02009	95.0	2.68	0	0.4161	8.034	31.9	5.1180	4	224	14.7	2.88
206	0.13642	0.0	10.59	0	0.4890	5.891	22.3	3.9454	4	277	18.6	10.87
207	0.22969	0.0	10.59	0	0.4890	6.326	52.5	4.3549	4	277	18.6	10.97
208	0.25199	0.0	10.59	0	0.4890	5.783	72.7	4.3549	4	277	18.6	18.06
209	0.13587	0.0	10.59	1	0.4890	6.064	59.1	4.2392	4	277	18.6	14.66
210	0.43571	0.0	10.59	1	0.4890	5.344	100.0	3.8750	4	277	18.6	23.09
211	0.17446	0.0	10.59	1	0.4890	5.960	92.1	3.8771	4	277	18.6	17.27
212	0.37578	0.0	10.59	1	0.4890	5.404	88.6	3.6650	4	277	18.6	23.98
213	0.21719	0.0	10.59	1	0.4890	5.807	53.8	3.6526	4	277	18.6	16.03
214	0.14052	0.0	10.59	0	0.4890	6.375	32.3	3.9454	4	277	18.6	9.38
215	0.28955	0.0	10.59	0	0.4890	5.412	9.8	3.5875	4	277	18.6	29.55
216	0.19802	0.0	10.59	0	0.4890	6.182	42.4	3.9454	4	277	18.6	9.47
217	0.04560	0.0	13.89	1	0.5500	5.888	56.0	3.1121	5	276	16.4	13.51
218	0.07013	0.0	13.89	0	0.5500	6.642	85.1	3.4211	5	276	16.4	9.69
219	0.11069	0.0	13.89	1	0.5500	5.951	93.8	2.8893	5	276	16.4	17.92
220	0.11425	0.0	13.89	1	0.5500	6.373	92.4	3.3633	5	276	16.4	10.50
221	0.35809	0.0	6.20	1	0.5070	6.951	88.5	2.8617	8	307	17.4	9.71
222	0.40771	0.0	6.20	1	0.5070	6.164	91.3	3.0480	8	307	17.4	21.46
223	0.62356	0.0	6.20	1	0.5070	6.879	77.7	3.2721	8	307	17.4	9.93
224	0.61470	0.0	6.20	0	0.5070	6.618	80.8	3.2721	8	307	17.4	7.60
225	0.31533	0.0	6.20	0	0.5040	8.266	78.3	2.8944	8	307	17.4	4.14
226	0.52693	0.0	6.20	0	0.5040	8.725	83.0	2.8944	8	307	17.4	4.63
227	0.38214	0.0	6.20	0	0.5040	8.040	86.5	3.2157	8	307	17.4	3.13
228	0.41238	0.0	6.20	0	0.5040	7.163	79.9	3.2157	8	307	17.4	6.36
229	0.29819	0.0	6.20	0	0.5040	7.686	17.0	3.3751	8	307	17.4	3.92
230	0.44178	0.0	6.20	0	0.5040	6.552	21.4	3.3751	8	307	17.4	3.76
231	0.53700	0.0	6.20	0	0.5040	5.981	68.1	3.6715	8	307	17.4	11.65
232	0.46296	0.0	6.20	0	0.5040	7.412	76.9	3.6715	8	307	17.4	5.25
233	0.57529	0.0	6.20	0	0.5070	8.337	73.3	3.8384	8	307	17.4	2.47
234	0.33147	0.0	6.20	0	0.5070	8.247	70.4	3.6519	8	307	17.4	3.95
235	0.44791	0.0	6.20	1	0.5070	6.726	66.5	3.6519	8	307	17.4	8.05
236	0.33045	0.0	6.20	0	0.5070	6.086	61.5	3.6519	8	307	17.4	10.88
237	0.52058	0.0	6.20	1	0.5070	6.631	76.5	4.1480	8	307	17.4	9.54
238	0.51183	0.0	6.20	0	0.5070	7.358	71.6	4.1480	8	307	17.4	4.73
239	0.08244	30.0	4.93	0	0.4280	6.481	18.5	6.1899	6	300	16.6	6.36
240	0.09252	30.0	4.93	0	0.4280	6.606	42.2	6.1899	6	300	16.6	7.37
241	0.11329	30.0	4.93	0	0.4280	6.897	54.3	6.3361	6	300	16.6	11.38
242	0.10612	30.0	4.93	0	0.4280	6.095	65.1	6.3361	6	300	16.6	12.40
243	0.10290	30.0	4.93	0	0.4280	6.358	52.9	7.0355	6	300	16.6	11.22
244	0.12757	30.0	4.93	0	0.4280	6.393	7.8	7.0355	6	300	16.6	5.19

245	0.20608	22.0	5.86	0	0.4310	5.593	76.5	7.9549	7	330	19.1	12.50
246	0.19133	22.0	5.86	0	0.4310	5.605	70.2	7.9549	7	330	19.1	18.46
247	0.33983	22.0	5.86	0	0.4310	6.108	34.9	8.0555	7	330	19.1	9.16
248	0.19657	22.0	5.86	0	0.4310	6.226	79.2	8.0555	7	330	19.1	10.15
249	0.16439	22.0	5.86	0	0.4310	6.433	49.1	7.8265	7	330	19.1	9.52
250	0.19073	22.0	5.86	0	0.4310	6.718	17.5	7.8265	7	330	19.1	6.56
251	0.14030	22.0	5.86	0	0.4310	6.487	13.0	7.3967	7	330	19.1	5.90
252	0.21409	22.0	5.86	0	0.4310	6.438	8.9	7.3967	7	330	19.1	3.59
253	0.08221	22.0	5.86	0	0.4310	6.957	6.8	8.9067	7	330	19.1	3.53
254	0.36894	22.0	5.86	0	0.4310	8.259	8.4	8.9067	7	330	19.1	3.54
255	0.04819	80.0	3.64	0	0.3920	6.108	32.0	9.2203	1	315	16.4	6.57
256	0.03548	80.0	3.64	0	0.3920	5.876	19.1	9.2203	1	315	16.4	9.25
257	0.01538	90.0	3.75	0	0.3940	7.454	34.2	6.3361	3	244	15.9	3.11
258	0.61154	20.0	3.97	0	0.6470	8.704	86.9	1.8010	5	264	13.0	5.12
259	0.66351	20.0	3.97	0	0.6470	7.333	100.0	1.8946	5	264	13.0	7.79
260	0.65665	20.0	3.97	0	0.6470	6.842	100.0	2.0107	5	264	13.0	6.90
261	0.54011	20.0	3.97	0	0.6470	7.203	81.8	2.1121	5	264	13.0	9.59
262	0.53412	20.0	3.97	0	0.6470	7.520	89.4	2.1398	5	264	13.0	7.26
263	0.52014	20.0	3.97	0	0.6470	8.398	91.5	2.2885	5	264	13.0	5.91
264	0.82526	20.0	3.97	0	0.6470	7.327	94.5	2.0788	5	264	13.0	11.25
265	0.55007	20.0	3.97	0	0.6470	7.206	91.6	1.9301	5	264	13.0	8.10
266	0.76162	20.0	3.97	0	0.6470	5.560	62.8	1.9865	5	264	13.0	10.45
267	0.78570	20.0	3.97	0	0.6470	7.014	84.6	2.1329	5	264	13.0	14.79
268	0.57834	20.0	3.97	0	0.5750	8.297	67.0	2.4216	5	264	13.0	7.44
269	0.54050	20.0	3.97	0	0.5750	7.470	52.6	2.8720	5	264	13.0	3.16
270	0.09065	20.0	6.96	1	0.4640	5.920	61.5	3.9175	3	223	18.6	13.65
271	0.29916	20.0	6.96	0	0.4640	5.856	42.1	4.4290	3	223	18.6	13.00
272	0.16211	20.0	6.96	0	0.4640	6.240	16.3	4.4290	3	223	18.6	6.59
273	0.11460	20.0	6.96	0	0.4640	6.538	58.7	3.9175	3	223	18.6	7.73
274	0.22188	20.0	6.96	1	0.4640	7.691	51.8	4.3665	3	223	18.6	6.58
275	0.05644	40.0	6.41	1	0.4470	6.758	32.9	4.0776	4	254	17.6	3.53
276	0.09604	40.0	6.41	0	0.4470	6.854	42.8	4.2673	4	254	17.6	2.98
277	0.10469	40.0	6.41	1	0.4470	7.267	49.0	4.7872	4	254	17.6	6.05
278	0.06127	40.0	6.41	1	0.4470	6.826	27.6	4.8628	4	254	17.6	4.16
279	0.07978	40.0	6.41	0	0.4470	6.482	32.1	4.1403	4	254	17.6	7.19
280	0.21038	20.0	3.33	0	0.4429	6.812	32.2	4.1007	5	216	14.9	4.85
281	0.03578	20.0	3.33	0	0.4429	7.820	64.5	4.6947	5	216	14.9	3.76
282	0.03705	20.0	3.33	0	0.4429	6.968	37.2	5.2447	5	216	14.9	4.59
283	0.06129	20.0	3.33	1	0.4429	7.645	49.7	5.2119	5	216	14.9	3.01
284	0.01501	90.0	1.21	1	0.4010	7.923	24.8	5.8850	1	198	13.6	3.16
285	0.00906	90.0	2.97	0	0.4000	7.088	20.8	7.3073	1	285	15.3	7.85
286	0.01096	55.0	2.25	0	0.3890	6.453	31.9	7.3073	1	300	15.3	8.23
287	0.01965	80.0	1.76	0	0.3850	6.230	31.5	9.0892	1	241	18.2	12.93

288	0.03871	52.5	5.32	0	0.4050	6.209	31.3	7.3172	6	293	16.6	7.14
289	0.04590	52.5	5.32	0	0.4050	6.315	45.6	7.3172	6	293	16.6	7.60
290	0.04297	52.5	5.32	0	0.4050	6.565	22.9	7.3172	6	293	16.6	9.51
291	0.03502	80.0	4.95	0	0.4110	6.861	27.9	5.1167	4	245	19.2	3.33
292	0.07886	80.0	4.95	0	0.4110	7.148	27.7	5.1167	4	245	19.2	3.56
293	0.03615	80.0	4.95	0	0.4110	6.630	23.4	5.1167	4	245	19.2	4.70
294	0.08265	0.0	13.92	0	0.4370	6.127	18.4	5.5027	4	289	16.0	8.58
295	0.08199	0.0	13.92	0	0.4370	6.009	42.3	5.5027	4	289	16.0	10.40
296	0.12932	0.0	13.92	0	0.4370	6.678	31.1	5.9604	4	289	16.0	6.27
297	0.05372	0.0	13.92	0	0.4370	6.549	51.0	5.9604	4	289	16.0	7.39
298	0.14103	0.0	13.92	0	0.4370	5.790	58.0	6.3200	4	289	16.0	15.84
299	0.06466	70.0	2.24	0	0.4000	6.345	20.1	7.8278	5	358	14.8	4.97
300	0.05561	70.0	2.24	0	0.4000	7.041	10.0	7.8278	5	358	14.8	4.74
301	0.04417	70.0	2.24	0	0.4000	6.871	47.4	7.8278	5	358	14.8	6.07
302	0.03537	34.0	6.09	0	0.4330	6.590	40.4	5.4917	7	329	16.1	9.50
303	0.09266	34.0	6.09	0	0.4330	6.495	18.4	5.4917	7	329	16.1	8.67
304	0.10000	34.0	6.09	0	0.4330	6.982	17.7	5.4917	7	329	16.1	4.86
305	0.05515	33.0	2.18	0	0.4720	7.236	41.1	4.0220	7	222	18.4	6.93
306	0.05479	33.0	2.18	0	0.4720	6.616	58.1	3.3700	7	222	18.4	8.93
307	0.07503	33.0	2.18	0	0.4720	7.420	71.9	3.0992	7	222	18.4	6.47
308	0.04932	33.0	2.18	0	0.4720	6.849	70.3	3.1827	7	222	18.4	7.53
309	0.49298	0.0	9.90	0	0.5440	6.635	82.5	3.3175	4	304	18.4	4.54
310	0.34940	0.0	9.90	0	0.5440	5.972	76.7	3.1025	4	304	18.4	9.97
311	2.63548	0.0	9.90	0	0.5440	4.973	37.8	2.5194	4	304	18.4	12.64
312	0.79041	0.0	9.90	0	0.5440	6.122	52.8	2.6403	4	304	18.4	5.98
313	0.26169	0.0	9.90	0	0.5440	6.023	90.4	2.8340	4	304	18.4	11.72
314	0.26938	0.0	9.90	0	0.5440	6.266	82.8	3.2628	4	304	18.4	7.90
315	0.36920	0.0	9.90	0	0.5440	6.567	87.3	3.6023	4	304	18.4	9.28
316	0.25356	0.0	9.90	0	0.5440	5.705	77.7	3.9450	4	304	18.4	11.50
317	0.31827	0.0	9.90	0	0.5440	5.914	83.2	3.9986	4	304	18.4	18.33
318	0.24522	0.0	9.90	0	0.5440	5.782	71.7	4.0317	4	304	18.4	15.94
319	0.40202	0.0	9.90	0	0.5440	6.382	67.2	3.5325	4	304	18.4	10.36
320	0.47547	0.0	9.90	0	0.5440	6.113	58.8	4.0019	4	304	18.4	12.73
321	0.16760	0.0	7.38	0	0.4930	6.426	52.3	4.5404	5	287	19.6	7.20
322	0.18159	0.0	7.38	0	0.4930	6.376	54.3	4.5404	5	287	19.6	6.87
323	0.35114	0.0	7.38	0	0.4930	6.041	49.9	4.7211	5	287	19.6	7.70
324	0.28392	0.0	7.38	0	0.4930	5.708	74.3	4.7211	5	287	19.6	11.74
325	0.34109	0.0	7.38	0	0.4930	6.415	40.1	4.7211	5	287	19.6	6.12
326	0.19186	0.0	7.38	0	0.4930	6.431	14.7	5.4159	5	287	19.6	5.08
327	0.30347	0.0	7.38	0	0.4930	6.312	28.9	5.4159	5	287	19.6	6.15
328	0.24103	0.0	7.38	0	0.4930	6.083	43.7	5.4159	5	287	19.6	12.79
329	0.06617	0.0	3.24	0	0.4600	5.868	25.8	5.2146	4	430	16.9	9.97
330	0.06724	0.0	3.24	0	0.4600	6.333	17.2	5.2146	4	430	16.9	7.34

331	0.04544	0.0	3.24	0	0.4600	6.144	32.2	5.8736	4	430	16.9	9.09
332	0.05023	35.0	6.06	0	0.4379	5.706	28.4	6.6407	1	304	16.9	12.43
333	0.03466	35.0	6.06	0	0.4379	6.031	23.3	6.6407	1	304	16.9	7.83
334	0.05083	0.0	5.19	0	0.5150	6.316	38.1	6.4584	5	224	20.2	5.68
335	0.03738	0.0	5.19	0	0.5150	6.310	38.5	6.4584	5	224	20.2	6.75
336	0.03961	0.0	5.19	0	0.5150	6.037	34.5	5.9853	5	224	20.2	8.01
337	0.03427	0.0	5.19	0	0.5150	5.869	46.3	5.2311	5	224	20.2	9.80
338	0.03041	0.0	5.19	0	0.5150	5.895	59.6	5.6150	5	224	20.2	10.56
339	0.03306	0.0	5.19	0	0.5150	6.059	37.3	4.8122	5	224	20.2	8.51
340	0.05497	0.0	5.19	0	0.5150	5.985	45.4	4.8122	5	224	20.2	9.74
341	0.06151	0.0	5.19	0	0.5150	5.968	58.5	4.8122	5	224	20.2	9.29
342	0.01301	35.0	1.52	0	0.4420	7.241	49.3	7.0379	1	284	15.5	5.49
343	0.02498	0.0	1.89	0	0.5180	6.540	59.7	6.2669	1	422	15.9	8.65
344	0.02543	55.0	3.78	0	0.4840	6.696	56.4	5.7321	5	370	17.6	7.18
345	0.03049	55.0	3.78	0	0.4840	6.874	28.1	6.4654	5	370	17.6	4.61
346	0.03113	0.0	4.39	0	0.4420	6.014	48.5	8.0136	3	352	18.8	10.53
347	0.06162	0.0	4.39	0	0.4420	5.898	52.3	8.0136	3	352	18.8	12.67
348	0.01870	85.0	4.15	0	0.4290	6.516	27.7	8.5353	4	351	17.9	6.36
349	0.01501	80.0	2.01	0	0.4350	6.635	29.7	8.3440	4	280	17.0	5.99
350	0.02899	40.0	1.25	0	0.4290	6.939	34.5	8.7921	1	335	19.7	5.89
351	0.06211	40.0	1.25	0	0.4290	6.490	44.4	8.7921	1	335	19.7	5.98
352	0.07950	60.0	1.69	0	0.4110	6.579	35.9	10.7103	4	411	18.3	5.49
353	0.07244	60.0	1.69	0	0.4110	5.884	18.5	10.7103	4	411	18.3	7.79
354	0.01709	90.0	2.02	0	0.4100	6.728	36.1	12.1265	5	187	17.0	4.50
355	0.04301	80.0	1.91	0	0.4130	5.663	21.9	10.5857	4	334	22.0	8.05
356	0.10659	80.0	1.91	0	0.4130	5.936	19.5	10.5857	4	334	22.0	5.57
357	8.98296	0.0	18.10	1	0.7700	6.212	97.4	2.1222	24	666	20.2	17.60
358	3.84970	0.0	18.10	1	0.7700	6.395	91.0	2.5052	24	666	20.2	13.27
359	5.20177	0.0	18.10	1	0.7700	6.127	83.4	2.7227	24	666	20.2	11.48
360	4.26131	0.0	18.10	0	0.7700	6.112	81.3	2.5091	24	666	20.2	12.67
361	4.54192	0.0	18.10	0	0.7700	6.398	88.0	2.5182	24	666	20.2	7.79
362	3.83684	0.0	18.10	0	0.7700	6.251	91.1	2.2955	24	666	20.2	14.19
363	3.67822	0.0	18.10	0	0.7700	5.362	96.2	2.1036	24	666	20.2	10.19
364	4.22239	0.0	18.10	1	0.7700	5.803	89.0	1.9047	24	666	20.2	14.64
365	3.47428	0.0	18.10	1	0.7180	8.780	82.9	1.9047	24	666	20.2	5.29
366	4.55587	0.0	18.10	0	0.7180	3.561	87.9	1.6132	24	666	20.2	7.12
367	3.69695	0.0	18.10	0	0.7180	4.963	91.4	1.7523	24	666	20.2	14.00
368	13.52220	0.0	18.10	0	0.6310	3.863	100.0	1.5106	24	666	20.2	13.33
369	4.89822	0.0	18.10	0	0.6310	4.970	100.0	1.3325	24	666	20.2	3.26
370	5.66998	0.0	18.10	1	0.6310	6.683	96.8	1.3567	24	666	20.2	3.73
371	6.53876	0.0	18.10	1	0.6310	7.016	97.5	1.2024	24	666	20.2	2.96
372	9.23230	0.0	18.10	0	0.6310	6.216	100.0	1.1691	24	666	20.2	9.53
373	8.26725	0.0	18.10	1	0.6680	5.875	89.6	1.1296	24	666	20.2	8.88

374	11.10810	0.0	18.10	0	0.6680	4.906	100.0	1.1742	24	666	20.2	34.77
375	18.49820	0.0	18.10	0	0.6680	4.138	100.0	1.1370	24	666	20.2	37.97
376	19.60910	0.0	18.10	0	0.6710	7.313	97.9	1.3163	24	666	20.2	13.44
377	15.28800	0.0	18.10	0	0.6710	6.649	93.3	1.3449	24	666	20.2	23.24
378	9.82349	0.0	18.10	0	0.6710	6.794	98.8	1.3580	24	666	20.2	21.24
379	23.64820	0.0	18.10	0	0.6710	6.380	96.2	1.3861	24	666	20.2	23.69
380	17.86670	0.0	18.10	0	0.6710	6.223	100.0	1.3861	24	666	20.2	21.78
381	88.97620	0.0	18.10	0	0.6710	6.968	91.9	1.4165	24	666	20.2	17.21
382	15.87440	0.0	18.10	0	0.6710	6.545	99.1	1.5192	24	666	20.2	21.08
383	9.18702	0.0	18.10	0	0.7000	5.536	100.0	1.5804	24	666	20.2	23.60
384	7.99248	0.0	18.10	0	0.7000	5.520	100.0	1.5331	24	666	20.2	24.56
385	20.08490	0.0	18.10	0	0.7000	4.368	91.2	1.4395	24	666	20.2	30.63
386	16.81180	0.0	18.10	0	0.7000	5.277	98.1	1.4261	24	666	20.2	30.81
387	24.39380	0.0	18.10	0	0.7000	4.652	100.0	1.4672	24	666	20.2	28.28
388	22.59710	0.0	18.10	0	0.7000	5.000	89.5	1.5184	24	666	20.2	31.99
389	14.33370	0.0	18.10	0	0.7000	4.880	100.0	1.5895	24	666	20.2	30.62
390	8.15174	0.0	18.10	0	0.7000	5.390	98.9	1.7281	24	666	20.2	20.85
391	6.96215	0.0	18.10	0	0.7000	5.713	97.0	1.9265	24	666	20.2	17.11
392	5.29305	0.0	18.10	0	0.7000	6.051	82.5	2.1678	24	666	20.2	18.76
393	11.57790	0.0	18.10	0	0.7000	5.036	97.0	1.7700	24	666	20.2	25.68
394	8.64476	0.0	18.10	0	0.6930	6.193	92.6	1.7912	24	666	20.2	15.17
395	13.35980	0.0	18.10	0	0.6930	5.887	94.7	1.7821	24	666	20.2	16.35
396	8.71675	0.0	18.10	0	0.6930	6.471	98.8	1.7257	24	666	20.2	17.12
397	5.87205	0.0	18.10	0	0.6930	6.405	96.0	1.6768	24	666	20.2	19.37
398	7.67202	0.0	18.10	0	0.6930	5.747	98.9	1.6334	24	666	20.2	19.92
399	38.35180	0.0	18.10	0	0.6930	5.453	100.0	1.4896	24	666	20.2	30.59
400	9.91655	0.0	18.10	0	0.6930	5.852	77.8	1.5004	24	666	20.2	29.97
401	25.04610	0.0	18.10	0	0.6930	5.987	100.0	1.5888	24	666	20.2	26.77
402	14.23620	0.0	18.10	0	0.6930	6.343	100.0	1.5741	24	666	20.2	20.32
403	9.59571	0.0	18.10	0	0.6930	6.404	100.0	1.6390	24	666	20.2	20.31
404	24.80170	0.0	18.10	0	0.6930	5.349	96.0	1.7028	24	666	20.2	19.77
405	41.52920	0.0	18.10	0	0.6930	5.531	85.4	1.6074	24	666	20.2	27.38
406	67.92080	0.0	18.10	0	0.6930	5.683	100.0	1.4254	24	666	20.2	22.98
407	20.71620	0.0	18.10	0	0.6590	4.138	100.0	1.1781	24	666	20.2	23.34
408	11.95110	0.0	18.10	0	0.6590	5.608	100.0	1.2852	24	666	20.2	12.13
409	7.40389	0.0	18.10	0	0.5970	5.617	97.9	1.4547	24	666	20.2	26.40
410	14.43830	0.0	18.10	0	0.5970	6.852	100.0	1.4655	24	666	20.2	19.78
411	51.13580	0.0	18.10	0	0.5970	5.757	100.0	1.4130	24	666	20.2	10.11
412	14.05070	0.0	18.10	0	0.5970	6.657	100.0	1.5275	24	666	20.2	21.22
413	18.81100	0.0	18.10	0	0.5970	4.628	100.0	1.5539	24	666	20.2	34.37
414	28.65580	0.0	18.10	0	0.5970	5.155	100.0	1.5894	24	666	20.2	20.08
415	45.74610	0.0	18.10	0	0.6930	4.519	100.0	1.6582	24	666	20.2	36.98
416	18.08460	0.0	18.10	0	0.6790	6.434	100.0	1.8347	24	666	20.2	29.05

417	10.83420	0.0	18.10	0	0.6790	6.782	90.8	1.8195	24	666	20.2	25.79
418	25.94060	0.0	18.10	0	0.6790	5.304	89.1	1.6475	24	666	20.2	26.64
419	73.53410	0.0	18.10	0	0.6790	5.957	100.0	1.8026	24	666	20.2	20.62
420	11.81230	0.0	18.10	0	0.7180	6.824	76.5	1.7940	24	666	20.2	22.74
421	11.08740	0.0	18.10	0	0.7180	6.411	100.0	1.8589	24	666	20.2	15.02
422	7.02259	0.0	18.10	0	0.7180	6.006	95.3	1.8746	24	666	20.2	15.70
423	12.04820	0.0	18.10	0	0.6140	5.648	87.6	1.9512	24	666	20.2	14.10
424	7.05042	0.0	18.10	0	0.6140	6.103	85.1	2.0218	24	666	20.2	23.29
425	8.79212	0.0	18.10	0	0.5840	5.565	70.6	2.0635	24	666	20.2	17.16
426	15.86030	0.0	18.10	0	0.6790	5.896	95.4	1.9096	24	666	20.2	24.39
427	12.24720	0.0	18.10	0	0.5840	5.837	59.7	1.9976	24	666	20.2	15.69
428	37.66190	0.0	18.10	0	0.6790	6.202	78.7	1.8629	24	666	20.2	14.52
429	7.36711	0.0	18.10	0	0.6790	6.193	78.1	1.9356	24	666	20.2	21.52
430	9.33889	0.0	18.10	0	0.6790	6.380	95.6	1.9682	24	666	20.2	24.08
431	8.49213	0.0	18.10	0	0.5840	6.348	86.1	2.0527	24	666	20.2	17.64
432	10.06230	0.0	18.10	0	0.5840	6.833	94.3	2.0882	24	666	20.2	19.69
433	6.44405	0.0	18.10	0	0.5840	6.425	74.8	2.2004	24	666	20.2	12.03
434	5.58107	0.0	18.10	0	0.7130	6.436	87.9	2.3158	24	666	20.2	16.22
435	13.91340	0.0	18.10	0	0.7130	6.208	95.0	2.2222	24	666	20.2	15.17
436	11.16040	0.0	18.10	0	0.7400	6.629	94.6	2.1247	24	666	20.2	23.27
437	14.42080	0.0	18.10	0	0.7400	6.461	93.3	2.0026	24	666	20.2	18.05
438	15.17720	0.0	18.10	0	0.7400	6.152	100.0	1.9142	24	666	20.2	26.45
439	13.67810	0.0	18.10	0	0.7400	5.935	87.9	1.8206	24	666	20.2	34.02
440	9.39063	0.0	18.10	0	0.7400	5.627	93.9	1.8172	24	666	20.2	22.88
441	22.05110	0.0	18.10	0	0.7400	5.818	92.4	1.8662	24	666	20.2	22.11
442	9.72418	0.0	18.10	0	0.7400	6.406	97.2	2.0651	24	666	20.2	19.52
443	5.66637	0.0	18.10	0	0.7400	6.219	100.0	2.0048	24	666	20.2	16.59
444	9.96654	0.0	18.10	0	0.7400	6.485	100.0	1.9784	24	666	20.2	18.85
445	12.80230	0.0	18.10	0	0.7400	5.854	96.6	1.8956	24	666	20.2	23.79
446	10.67180	0.0	18.10	0	0.7400	6.459	94.8	1.9879	24	666	20.2	23.98
447	6.28807	0.0	18.10	0	0.7400	6.341	96.4	2.0720	24	666	20.2	17.79
448	9.92485	0.0	18.10	0	0.7400	6.251	96.6	2.1980	24	666	20.2	16.44
449	9.32909	0.0	18.10	0	0.7130	6.185	98.7	2.2616	24	666	20.2	18.13
450	7.52601	0.0	18.10	0	0.7130	6.417	98.3	2.1850	24	666	20.2	19.31
451	6.71772	0.0	18.10	0	0.7130	6.749	92.6	2.3236	24	666	20.2	17.44
452	5.44114	0.0	18.10	0	0.7130	6.655	98.2	2.3552	24	666	20.2	17.73
453	5.09017	0.0	18.10	0	0.7130	6.297	91.8	2.3682	24	666	20.2	17.27
454	8.24809	0.0	18.10	0	0.7130	7.393	99.3	2.4527	24	666	20.2	16.74
455	9.51363	0.0	18.10	0	0.7130	6.728	94.1	2.4961	24	666	20.2	18.71
456	4.75237	0.0	18.10	0	0.7130	6.525	86.5	2.4358	24	666	20.2	18.13
457	4.66883	0.0	18.10	0	0.7130	5.976	87.9	2.5806	24	666	20.2	19.01
458	8.20058	0.0	18.10	0	0.7130	5.936	80.3	2.7792	24	666	20.2	16.94
459	7.75223	0.0	18.10	0	0.7130	6.301	83.7	2.7831	24	666	20.2	16.23

460	6.80117	0.0	18.10	0	0.7130	6.081	84.4	2.7175	24	666	20.2	14.70
461	4.81213	0.0	18.10	0	0.7130	6.701	90.0	2.5975	24	666	20.2	16.42
462	3.69311	0.0	18.10	0	0.7130	6.376	88.4	2.5671	24	666	20.2	14.65
463	6.65492	0.0	18.10	0	0.7130	6.317	83.0	2.7344	24	666	20.2	13.99
464	5.82115	0.0	18.10	0	0.7130	6.513	89.9	2.8016	24	666	20.2	10.29
465	7.83932	0.0	18.10	0	0.6550	6.209	65.4	2.9634	24	666	20.2	13.22
466	3.16360	0.0	18.10	0	0.6550	5.759	48.2	3.0665	24	666	20.2	14.13
467	3.77498	0.0	18.10	0	0.6550	5.952	84.7	2.8715	24	666	20.2	17.15
468	4.42228	0.0	18.10	0	0.5840	6.003	94.5	2.5403	24	666	20.2	21.32
469	15.57570	0.0	18.10	0	0.5800	5.926	71.0	2.9084	24	666	20.2	18.13
470	13.07510	0.0	18.10	0	0.5800	5.713	56.7	2.8237	24	666	20.2	14.76
471	4.34879	0.0	18.10	0	0.5800	6.167	84.0	3.0334	24	666	20.2	16.29
472	4.03841	0.0	18.10	0	0.5320	6.229	90.7	3.0993	24	666	20.2	12.87
473	3.56868	0.0	18.10	0	0.5800	6.437	75.0	2.8965	24	666	20.2	14.36
474	4.64689	0.0	18.10	0	0.6140	6.980	67.6	2.5329	24	666	20.2	11.66
475	8.05579	0.0	18.10	0	0.5840	5.427	95.4	2.4298	24	666	20.2	18.14
476	6.39312	0.0	18.10	0	0.5840	6.162	97.4	2.2060	24	666	20.2	24.10
477	4.87141	0.0	18.10	0	0.6140	6.484	93.6	2.3053	24	666	20.2	18.68
478	15.02340	0.0	18.10	0	0.6140	5.304	97.3	2.1007	24	666	20.2	24.91
479	10.23300	0.0	18.10	0	0.6140	6.185	96.7	2.1705	24	666	20.2	18.03
480	14.33370	0.0	18.10	0	0.6140	6.229	88.0	1.9512	24	666	20.2	13.11
481	5.82401	0.0	18.10	0	0.5320	6.242	64.7	3.4242	24	666	20.2	10.74
482	5.70818	0.0	18.10	0	0.5320	6.750	74.9	3.3317	24	666	20.2	7.74
483	5.73116	0.0	18.10	0	0.5320	7.061	77.0	3.4106	24	666	20.2	7.01
484	2.81838	0.0	18.10	0	0.5320	5.762	40.3	4.0983	24	666	20.2	10.42
485	2.37857	0.0	18.10	0	0.5830	5.871	41.9	3.7240	24	666	20.2	13.34
486	3.67367	0.0	18.10	0	0.5830	6.312	51.9	3.9917	24	666	20.2	10.58
487	5.69175	0.0	18.10	0	0.5830	6.114	79.8	3.5459	24	666	20.2	14.98
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491	0.20746	0.0	27.74	0	0.6090	5.093	98.0	1.8226	4	711	20.1	29.68
492	0.10574	0.0	27.74	0	0.6090	5.983	98.8	1.8681	4	711	20.1	18.07
493	0.11132	0.0	27.74	0	0.6090	5.983	83.5	2.1099	4	711	20.1	13.35
494	0.17331	0.0	9.69	0	0.5850	5.707	54.0	2.3817	6	391	19.2	12.01
495	0.27957	0.0	9.69	0	0.5850	5.926	42.6	2.3817	6	391	19.2	13.59
496	0.17899	0.0	9.69	0	0.5850	5.670	28.8	2.7986	6	391	19.2	17.60
497	0.28960	0.0	9.69	0	0.5850	5.390	72.9	2.7986	6	391	19.2	21.14
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499	0.23912	0.0	9.69	0	0.5850	6.019	65.3	2.4091	6	391	19.2	12.92
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1	0.00632	18.0	2.31	0	0.5380	6.575	65.2	4.0900	1	296	15.3	4.98
2	0.02731	0.0	7.07	0	0.4690	6.421	78.9	4.9671	2	242	17.8	9.14
3	0.02729	0.0	7.07	0	0.4690	7.185	61.1	4.9671	2	242	17.8	4.03
4	0.03237	0.0	2.18	0	0.4580	6.998	45.8	6.0622	3	222	18.7	2.94
5	0.06905	0.0	2.18	0	0.4580	7.147	54.2	6.0622	3	222	18.7	5.33
6	0.02985	0.0	2.18	0	0.4580	6.430	58.7	6.0622	3	222	18.7	5.21
7	0.08829	12.5	7.87	0	0.5240	6.012	66.6	5.5605	5	311	15.2	12.43
8	0.14455	12.5	7.87	0	0.5240	6.172	96.1	5.9505	5	311	15.2	19.15
9	0.21124	12.5	7.87	0	0.5240	5.631	100.0	6.0821	5	311	15.2	29.93
10	0.17004	12.5	7.87	0	0.5240	6.004	85.9	6.5921	5	311	15.2	17.10
11	0.22489	12.5	7.87	0	0.5240	6.377	94.3	6.3467	5	311	15.2	20.45
12	0.11747	12.5	7.87	0	0.5240	6.009	82.9	6.2267	5	311	15.2	13.27
13	0.09378	12.5	7.87	0	0.5240	5.889	39.0	5.4509	5	311	15.2	15.71
14	0.62976	0.0	8.14	0	0.5380	5.949	61.8	4.7075	4	307	21.0	8.26
15	0.63796	0.0	8.14	0	0.5380	6.096	84.5	4.4619	4	307	21.0	10.26
16	0.62739	0.0	8.14	0	0.5380	5.834	56.5	4.4986	4	307	21.0	8.47
17	1.05393	0.0	8.14	0	0.5380	5.935	29.3	4.4986	4	307	21.0	6.58
18	0.78420	0.0	8.14	0	0.5380	5.990	81.7	4.2579	4	307	21.0	14.67
19	0.80271	0.0	8.14	0	0.5380	5.456	36.6	3.7965	4	307	21.0	11.69
20	0.72580	0.0	8.14	0	0.5380	5.727	69.5	3.7965	4	307	21.0	11.28
21	1.25179	0.0	8.14	0	0.5380	5.570	98.1	3.7979	4	307	21.0	21.02
22	0.85204	0.0	8.14	0	0.5380	5.965	89.2	4.0123	4	307	21.0	13.83
23	1.23247	0.0	8.14	0	0.5380	6.142	91.7	3.9769	4	307	21.0	18.72
24	0.98843	0.0	8.14	0	0.5380	5.813	100.0	4.0952	4	307	21.0	19.88
25	0.75026	0.0	8.14	0	0.5380	5.924	94.1	4.3996	4	307	21.0	16.30
26	0.84054	0.0	8.14	0	0.5380	5.599	85.7	4.4546	4	307	21.0	16.51
27	0.67191	0.0	8.14	0	0.5380	5.813	90.3	4.6820	4	307	21.0	14.81
28	0.95577	0.0	8.14	0	0.5380	6.047	88.8	4.4534	4	307	21.0	17.28
29	0.77299	0.0	8.14	0	0.5380	6.495	94.4	4.4547	4	307	21.0	12.80
30	1.00245	0.0	8.14	0	0.5380	6.674	87.3	4.2390	4	307	21.0	11.98
31	1.13081	0.0	8.14	0	0.5380	5.713	94.1	4.2330	4	307	21.0	22.60
32	1.35472	0.0	8.14	0	0.5380	6.072	100.0	4.1750	4	307	21.0	13.04
33	1.38799	0.0	8.14	0	0.5380	5.950	82.0	3.9900	4	307	21.0	27.71
34	1.15172	0.0	8.14	0	0.5380	5.701	95.0	3.7872	4	307	21.0	18.35
35	1.61282	0.0	8.14	0	0.5380	6.096	96.9	3.7598	4	307	21.0	20.34
36	0.06417	0.0	5.96	0	0.4990	5.933	68.2	3.3603	5	279	19.2	9.68
37	0.09744	0.0	5.96	0	0.4990	5.841	61.4	3.3779	5	279	19.2	11.41
38	0.08014	0.0	5.96	0	0.4990	5.850	41.5	3.9342	5	279	19.2	8.77
39	0.17505	0.0	5.96	0	0.4990	5.966	30.2	3.8473	5	279	19.2	10.13
40	0.02763	75.0	2.95	0	0.4280	6.595	21.8	5.4011	3	252	18.3	4.32
41	0.03359	75.0	2.95	0	0.4280	7.024	15.8	5.4011	3	252	18.3	1.98
42	0.12744	0.0	6.91	0	0.4480	6.770	2.9	5.7209	3	233	17.9	4.84
43	0.14150	0.0	6.91	0	0.4480	6.169	6.6	5.7209	3	233	17.9	5.81

44	0.15936	0.0	6.91	0	0.4480	6.211	6.5	5.7209	3	233	17.9	7.44
45	0.12269	0.0	6.91	0	0.4480	6.069	40.0	5.7209	3	233	17.9	9.55
46	0.17142	0.0	6.91	0	0.4480	5.682	33.8	5.1004	3	233	17.9	10.21
47	0.18836	0.0	6.91	0	0.4480	5.786	33.3	5.1004	3	233	17.9	14.15
48	0.22927	0.0	6.91	0	0.4480	6.030	85.5	5.6894	3	233	17.9	18.80
49	0.25387	0.0	6.91	0	0.4480	5.399	95.3	5.8700	3	233	17.9	30.81
50	0.21977	0.0	6.91	0	0.4480	5.602	62.0	6.0877	3	233	17.9	16.20
51	0.08873	21.0	5.64	0	0.4390	5.963	45.7	6.8147	4	243	16.8	13.45
52	0.04337	21.0	5.64	0	0.4390	6.115	63.0	6.8147	4	243	16.8	9.43
53	0.05360	21.0	5.64	0	0.4390	6.511	21.1	6.8147	4	243	16.8	5.28
54	0.04981	21.0	5.64	0	0.4390	5.998	21.4	6.8147	4	243	16.8	8.43
55	0.01360	75.0	4.00	0	0.4100	5.888	47.6	7.3197	3	469	21.1	14.80
56	0.01311	90.0	1.22	0	0.4030	7.249	21.9	8.6966	5	226	17.9	4.81
57	0.02055	85.0	0.74	0	0.4100	6.383	35.7	9.1876	2	313	17.3	5.77
58	0.01432	100.0	1.32	0	0.4110	6.816	40.5	8.3248	5	256	15.1	3.95
59	0.15445	25.0	5.13	0	0.4530	6.145	29.2	7.8148	8	284	19.7	6.86
60	0.10328	25.0	5.13	0	0.4530	5.927	47.2	6.9320	8	284	19.7	9.22
61	0.14932	25.0	5.13	0	0.4530	5.741	66.2	7.2254	8	284	19.7	13.15
62	0.17171	25.0	5.13	0	0.4530	5.966	93.4	6.8185	8	284	19.7	14.44
63	0.11027	25.0	5.13	0	0.4530	6.456	67.8	7.2255	8	284	19.7	6.73
64	0.12650	25.0	5.13	0	0.4530	6.762	43.4	7.9809	8	284	19.7	9.50
65	0.01951	17.5	1.38	0	0.4161	7.104	59.5	9.2229	3	216	18.6	8.05
66	0.03584	80.0	3.37	0	0.3980	6.290	17.8	6.6115	4	337	16.1	4.67
67	0.04379	80.0	3.37	0	0.3980	5.787	31.1	6.6115	4	337	16.1	10.24
68	0.05789	12.5	6.07	0	0.4090	5.878	21.4	6.4980	4	345	18.9	8.10
69	0.13554	12.5	6.07	0	0.4090	5.594	36.8	6.4980	4	345	18.9	13.09
70	0.12816	12.5	6.07	0	0.4090	5.885	33.0	6.4980	4	345	18.9	8.79
71	0.08826	0.0	10.81	0	0.4130	6.417	6.6	5.2873	4	305	19.2	6.72
72	0.15876	0.0	10.81	0	0.4130	5.961	17.5	5.2873	4	305	19.2	9.88
73	0.09164	0.0	10.81	0	0.4130	6.065	7.8	5.2873	4	305	19.2	5.52
74	0.19539	0.0	10.81	0	0.4130	6.245	6.2	5.2873	4	305	19.2	7.54
75	0.07896	0.0	12.83	0	0.4370	6.273	6.0	4.2515	5	398	18.7	6.78
76	0.09512	0.0	12.83	0	0.4370	6.286	45.0	4.5026	5	398	18.7	8.94
77	0.10153	0.0	12.83	0	0.4370	6.279	74.5	4.0522	5	398	18.7	11.97
78	0.08707	0.0	12.83	0	0.4370	6.140	45.8	4.0905	5	398	18.7	10.27
79	0.05646	0.0	12.83	0	0.4370	6.232	53.7	5.0141	5	398	18.7	12.34
80	0.08387	0.0	12.83	0	0.4370	5.874	36.6	4.5026	5	398	18.7	9.10
81	0.04113	25.0	4.86	0	0.4260	6.727	33.5	5.4007	4	281	19.0	5.29
82	0.04462	25.0	4.86	0	0.4260	6.619	70.4	5.4007	4	281	19.0	7.22
83	0.03659	25.0	4.86	0	0.4260	6.302	32.2	5.4007	4	281	19.0	6.72
84	0.03551	25.0	4.86	0	0.4260	6.167	46.7	5.4007	4	281	19.0	7.51
85	0.05059	0.0	4.49	0	0.4490	6.389	48.0	4.7794	3	247	18.5	9.62
86	0.05735	0.0	4.49	0	0.4490	6.630	56.1	4.4377	3	247	18.5	6.53

87	0.05188	0.0	4.49	0	0.4490	6.015	45.1	4.4272	3	247	18.5	12.86
88	0.07151	0.0	4.49	0	0.4490	6.121	56.8	3.7476	3	247	18.5	8.44
89	0.05660	0.0	3.41	0	0.4890	7.007	86.3	3.4217	2	270	17.8	5.50
90	0.05302	0.0	3.41	0	0.4890	7.079	63.1	3.4145	2	270	17.8	5.70
91	0.04684	0.0	3.41	0	0.4890	6.417	66.1	3.0923	2	270	17.8	8.81
92	0.03932	0.0	3.41	0	0.4890	6.405	73.9	3.0921	2	270	17.8	8.20
93	0.04203	28.0	15.04	0	0.4640	6.442	53.6	3.6659	4	270	18.2	8.16
94	0.02875	28.0	15.04	0	0.4640	6.211	28.9	3.6659	4	270	18.2	6.21
95	0.04294	28.0	15.04	0	0.4640	6.249	77.3	3.6150	4	270	18.2	10.59
96	0.12204	0.0	2.89	0	0.4450	6.625	57.8	3.4952	2	276	18.0	6.65
97	0.11504	0.0	2.89	0	0.4450	6.163	69.6	3.4952	2	276	18.0	11.34
98	0.12083	0.0	2.89	0	0.4450	8.069	76.0	3.4952	2	276	18.0	4.21
99	0.08187	0.0	2.89	0	0.4450	7.820	36.9	3.4952	2	276	18.0	3.57
100	0.06860	0.0	2.89	0	0.4450	7.416	62.5	3.4952	2	276	18.0	6.19
101	0.14866	0.0	8.56	0	0.5200	6.727	79.9	2.7778	5	384	20.9	9.42
102	0.11432	0.0	8.56	0	0.5200	6.781	71.3	2.8561	5	384	20.9	7.67
103	0.22876	0.0	8.56	0	0.5200	6.405	85.4	2.7147	5	384	20.9	10.63
104	0.21161	0.0	8.56	0	0.5200	6.137	87.4	2.7147	5	384	20.9	13.44
105	0.13960	0.0	8.56	0	0.5200	6.167	90.0	2.4210	5	384	20.9	12.33
106	0.13262	0.0	8.56	0	0.5200	5.851	96.7	2.1069	5	384	20.9	16.47
107	0.17120	0.0	8.56	0	0.5200	5.836	91.9	2.2110	5	384	20.9	18.66
108	0.13117	0.0	8.56	0	0.5200	6.127	85.2	2.1224	5	384	20.9	14.09
109	0.12802	0.0	8.56	0	0.5200	6.474	97.1	2.4329	5	384	20.9	12.27
110	0.26363	0.0	8.56	0	0.5200	6.229	91.2	2.5451	5	384	20.9	15.55
111	0.10793	0.0	8.56	0	0.5200	6.195	54.4	2.7778	5	384	20.9	13.00
112	0.10084	0.0	10.01	0	0.5470	6.715	81.6	2.6775	6	432	17.8	10.16
113	0.12329	0.0	10.01	0	0.5470	5.913	92.9	2.3534	6	432	17.8	16.21
114	0.22212	0.0	10.01	0	0.5470	6.092	95.4	2.5480	6	432	17.8	17.09
115	0.14231	0.0	10.01	0	0.5470	6.254	84.2	2.2565	6	432	17.8	10.45
116	0.17134	0.0	10.01	0	0.5470	5.928	88.2	2.4631	6	432	17.8	15.76
117	0.13158	0.0	10.01	0	0.5470	6.176	72.5	2.7301	6	432	17.8	12.04
118	0.15098	0.0	10.01	0	0.5470	6.021	82.6	2.7474	6	432	17.8	10.30
119	0.13058	0.0	10.01	0	0.5470	5.872	73.1	2.4775	6	432	17.8	15.37
120	0.14476	0.0	10.01	0	0.5470	5.731	65.2	2.7592	6	432	17.8	13.61
121	0.06899	0.0	25.65	0	0.5810	5.870	69.7	2.2577	2	188	19.1	14.37
122	0.07165	0.0	25.65	0	0.5810	6.004	84.1	2.1974	2	188	19.1	14.27
123	0.09299	0.0	25.65	0	0.5810	5.961	92.9	2.0869	2	188	19.1	17.93
124	0.15038	0.0	25.65	0	0.5810	5.856	97.0	1.9444	2	188	19.1	25.41
125	0.09849	0.0	25.65	0	0.5810	5.879	95.8	2.0063	2	188	19.1	17.58
126	0.16902	0.0	25.65	0	0.5810	5.986	88.4	1.9929	2	188	19.1	14.81
127	0.38735	0.0	25.65	0	0.5810	5.613	95.6	1.7572	2	188	19.1	27.26
128	0.25915	0.0	21.89	0	0.6240	5.693	96.0	1.7883	4	437	21.2	17.19
129	0.32543	0.0	21.89	0	0.6240	6.431	98.8	1.8125	4	437	21.2	15.39

130	0.88125	0.0	21.89	0	0.6240	5.637	94.7	1.9799	4	437	21.2	18.34
131	0.34006	0.0	21.89	0	0.6240	6.458	98.9	2.1185	4	437	21.2	12.60
132	1.19294	0.0	21.89	0	0.6240	6.326	97.7	2.2710	4	437	21.2	12.26
133	0.59005	0.0	21.89	0	0.6240	6.372	97.9	2.3274	4	437	21.2	11.12
134	0.32982	0.0	21.89	0	0.6240	5.822	95.4	2.4699	4	437	21.2	15.03
135	0.97617	0.0	21.89	0	0.6240	5.757	98.4	2.3460	4	437	21.2	17.31
136	0.55778	0.0	21.89	0	0.6240	6.335	98.2	2.1107	4	437	21.2	16.96
137	0.32264	0.0	21.89	0	0.6240	5.942	93.5	1.9669	4	437	21.2	16.90
138	0.35233	0.0	21.89	0	0.6240	6.454	98.4	1.8498	4	437	21.2	14.59
139	0.24980	0.0	21.89	0	0.6240	5.857	98.2	1.6686	4	437	21.2	21.32
140	0.54452	0.0	21.89	0	0.6240	6.151	97.9	1.6687	4	437	21.2	18.46
141	0.29090	0.0	21.89	0	0.6240	6.174	93.6	1.6119	4	437	21.2	24.16
142	1.62864	0.0	21.89	0	0.6240	5.019	100.0	1.4394	4	437	21.2	34.41
143	3.32105	0.0	19.58	1	0.8710	5.403	100.0	1.3216	5	403	14.7	26.82
144	4.09740	0.0	19.58	0	0.8710	5.468	100.0	1.4118	5	403	14.7	26.42
145	2.77974	0.0	19.58	0	0.8710	4.903	97.8	1.3459	5	403	14.7	29.29
146	2.37934	0.0	19.58	0	0.8710	6.130	100.0	1.4191	5	403	14.7	27.80
147	2.15505	0.0	19.58	0	0.8710	5.628	100.0	1.5166	5	403	14.7	16.65
148	2.36862	0.0	19.58	0	0.8710	4.926	95.7	1.4608	5	403	14.7	29.53
149	2.33099	0.0	19.58	0	0.8710	5.186	93.8	1.5296	5	403	14.7	28.32
150	2.73397	0.0	19.58	0	0.8710	5.597	94.9	1.5257	5	403	14.7	21.45
151	1.65660	0.0	19.58	0	0.8710	6.122	97.3	1.6180	5	403	14.7	14.10
152	1.49632	0.0	19.58	0	0.8710	5.404	100.0	1.5916	5	403	14.7	13.28
153	1.12658	0.0	19.58	1	0.8710	5.012	88.0	1.6102	5	403	14.7	12.12
154	2.14918	0.0	19.58	0	0.8710	5.709	98.5	1.6232	5	403	14.7	15.79
155	1.41385	0.0	19.58	1	0.8710	6.129	96.0	1.7494	5	403	14.7	15.12
156	3.53501	0.0	19.58	1	0.8710	6.152	82.6	1.7455	5	403	14.7	15.02
157	2.44668	0.0	19.58	0	0.8710	5.272	94.0	1.7364	5	403	14.7	16.14
158	1.22358	0.0	19.58	0	0.6050	6.943	97.4	1.8773	5	403	14.7	4.59
159	1.34284	0.0	19.58	0	0.6050	6.066	100.0	1.7573	5	403	14.7	6.43
160	1.42502	0.0	19.58	0	0.8710	6.510	100.0	1.7659	5	403	14.7	7.39
161	1.27346	0.0	19.58	1	0.6050	6.250	92.6	1.7984	5	403	14.7	5.50
162	1.46336	0.0	19.58	0	0.6050	7.489	90.8	1.9709	5	403	14.7	1.73
163	1.83377	0.0	19.58	1	0.6050	7.802	98.2	2.0407	5	403	14.7	1.92
164	1.51902	0.0	19.58	1	0.6050	8.375	93.9	2.1620	5	403	14.7	3.32
165	2.24236	0.0	19.58	0	0.6050	5.854	91.8	2.4220	5	403	14.7	11.64
166	2.92400	0.0	19.58	0	0.6050	6.101	93.0	2.2834	5	403	14.7	9.81
167	2.01019	0.0	19.58	0	0.6050	7.929	96.2	2.0459	5	403	14.7	3.70
168	1.80028	0.0	19.58	0	0.6050	5.877	79.2	2.4259	5	403	14.7	12.14
169	2.30040	0.0	19.58	0	0.6050	6.319	96.1	2.1000	5	403	14.7	11.10
170	2.44953	0.0	19.58	0	0.6050	6.402	95.2	2.2625	5	403	14.7	11.32
171	1.20742	0.0	19.58	0	0.6050	5.875	94.6	2.4259	5	403	14.7	14.43
172	2.31390	0.0	19.58	0	0.6050	5.880	97.3	2.3887	5	403	14.7	12.03

173	0.13914	0.0	4.05	0	0.5100	5.572	88.5	2.5961	5	296	16.6	14.69
174	0.09178	0.0	4.05	0	0.5100	6.416	84.1	2.6463	5	296	16.6	9.04
175	0.08447	0.0	4.05	0	0.5100	5.859	68.7	2.7019	5	296	16.6	9.64
176	0.06664	0.0	4.05	0	0.5100	6.546	33.1	3.1323	5	296	16.6	5.33
177	0.07022	0.0	4.05	0	0.5100	6.020	47.2	3.5549	5	296	16.6	10.11
178	0.05425	0.0	4.05	0	0.5100	6.315	73.4	3.3175	5	296	16.6	6.29
179	0.06642	0.0	4.05	0	0.5100	6.860	74.4	2.9153	5	296	16.6	6.92
180	0.05780	0.0	2.46	0	0.4880	6.980	58.4	2.8290	3	193	17.8	5.04
181	0.06588	0.0	2.46	0	0.4880	7.765	83.3	2.7410	3	193	17.8	7.56
182	0.06888	0.0	2.46	0	0.4880	6.144	62.2	2.5979	3	193	17.8	9.45
183	0.09103	0.0	2.46	0	0.4880	7.155	92.2	2.7006	3	193	17.8	4.82
184	0.10008	0.0	2.46	0	0.4880	6.563	95.6	2.8470	3	193	17.8	5.68
185	0.08308	0.0	2.46	0	0.4880	5.604	89.8	2.9879	3	193	17.8	13.98
186	0.06047	0.0	2.46	0	0.4880	6.153	68.8	3.2797	3	193	17.8	13.15
187	0.05602	0.0	2.46	0	0.4880	7.831	53.6	3.1992	3	193	17.8	4.45
188	0.07875	45.0	3.44	0	0.4370	6.782	41.1	3.7886	5	398	15.2	6.68
189	0.12579	45.0	3.44	0	0.4370	6.556	29.1	4.5667	5	398	15.2	4.56
190	0.08370	45.0	3.44	0	0.4370	7.185	38.9	4.5667	5	398	15.2	5.39
191	0.09068	45.0	3.44	0	0.4370	6.951	21.5	6.4798	5	398	15.2	5.10
192	0.06911	45.0	3.44	0	0.4370	6.739	30.8	6.4798	5	398	15.2	4.69
193	0.08664	45.0	3.44	0	0.4370	7.178	26.3	6.4798	5	398	15.2	2.87
194	0.02187	60.0	2.93	0	0.4010	6.800	9.9	6.2196	1	265	15.6	5.03
195	0.01439	60.0	2.93	0	0.4010	6.604	18.8	6.2196	1	265	15.6	4.38
196	0.01381	80.0	0.46	0	0.4220	7.875	32.0	5.6484	4	255	14.4	2.97
197	0.04011	80.0	1.52	0	0.4040	7.287	34.1	7.3090	2	329	12.6	4.08
198	0.04666	80.0	1.52	0	0.4040	7.107	36.6	7.3090	2	329	12.6	8.61
199	0.03768	80.0	1.52	0	0.4040	7.274	38.3	7.3090	2	329	12.6	6.62
200	0.03150	95.0	1.47	0	0.4030	6.975	15.3	7.6534	3	402	17.0	4.56
201	0.01778	95.0	1.47	0	0.4030	7.135	13.9	7.6534	3	402	17.0	4.45
202	0.03445	82.5	2.03	0	0.4150	6.162	38.4	6.2700	2	348	14.7	7.43
203	0.02177	82.5	2.03	0	0.4150	7.610	15.7	6.2700	2	348	14.7	3.11
204	0.03510	95.0	2.68	0	0.4161	7.853	33.2	5.1180	4	224	14.7	3.81
205	0.02009	95.0	2.68	0	0.4161	8.034	31.9	5.1180	4	224	14.7	2.88
206	0.13642	0.0	10.59	0	0.4890	5.891	22.3	3.9454	4	277	18.6	10.87
207	0.22969	0.0	10.59	0	0.4890	6.326	52.5	4.3549	4	277	18.6	10.97
208	0.25199	0.0	10.59	0	0.4890	5.783	72.7	4.3549	4	277	18.6	18.06
209	0.13587	0.0	10.59	1	0.4890	6.064	59.1	4.2392	4	277	18.6	14.66
210	0.43571	0.0	10.59	1	0.4890	5.344	100.0	3.8750	4	277	18.6	23.09
211	0.17446	0.0	10.59	1	0.4890	5.960	92.1	3.8771	4	277	18.6	17.27
212	0.37578	0.0	10.59	1	0.4890	5.404	88.6	3.6650	4	277	18.6	23.98
213	0.21719	0.0	10.59	1	0.4890	5.807	53.8	3.6526	4	277	18.6	16.03
214	0.14052	0.0	10.59	0	0.4890	6.375	32.3	3.9454	4	277	18.6	9.38
215	0.28955	0.0	10.59	0	0.4890	5.412	9.8	3.5875	4	277	18.6	29.55

216	0.19802	0.0	10.59	0	0.4890	6.182	42.4	3.9454	4	277	18.6	9.47
217	0.04560	0.0	13.89	1	0.5500	5.888	56.0	3.1121	5	276	16.4	13.51
218	0.07013	0.0	13.89	0	0.5500	6.642	85.1	3.4211	5	276	16.4	9.69
219	0.11069	0.0	13.89	1	0.5500	5.951	93.8	2.8893	5	276	16.4	17.92
220	0.11425	0.0	13.89	1	0.5500	6.373	92.4	3.3633	5	276	16.4	10.50
221	0.35809	0.0	6.20	1	0.5070	6.951	88.5	2.8617	8	307	17.4	9.71
222	0.40771	0.0	6.20	1	0.5070	6.164	91.3	3.0480	8	307	17.4	21.46
223	0.62356	0.0	6.20	1	0.5070	6.879	77.7	3.2721	8	307	17.4	9.93
224	0.61470	0.0	6.20	0	0.5070	6.618	80.8	3.2721	8	307	17.4	7.60
225	0.31533	0.0	6.20	0	0.5040	8.266	78.3	2.8944	8	307	17.4	4.14
226	0.52693	0.0	6.20	0	0.5040	8.725	83.0	2.8944	8	307	17.4	4.63
227	0.38214	0.0	6.20	0	0.5040	8.040	86.5	3.2157	8	307	17.4	3.13
228	0.41238	0.0	6.20	0	0.5040	7.163	79.9	3.2157	8	307	17.4	6.36
229	0.29819	0.0	6.20	0	0.5040	7.686	17.0	3.3751	8	307	17.4	3.92
230	0.44178	0.0	6.20	0	0.5040	6.552	21.4	3.3751	8	307	17.4	3.76
231	0.53700	0.0	6.20	0	0.5040	5.981	68.1	3.6715	8	307	17.4	11.65
232	0.46296	0.0	6.20	0	0.5040	7.412	76.9	3.6715	8	307	17.4	5.25
233	0.57529	0.0	6.20	0	0.5070	8.337	73.3	3.8384	8	307	17.4	2.47
234	0.33147	0.0	6.20	0	0.5070	8.247	70.4	3.6519	8	307	17.4	3.95
235	0.44791	0.0	6.20	1	0.5070	6.726	66.5	3.6519	8	307	17.4	8.05
236	0.33045	0.0	6.20	0	0.5070	6.086	61.5	3.6519	8	307	17.4	10.88
237	0.52058	0.0	6.20	1	0.5070	6.631	76.5	4.1480	8	307	17.4	9.54
238	0.51183	0.0	6.20	0	0.5070	7.358	71.6	4.1480	8	307	17.4	4.73
239	0.08244	30.0	4.93	0	0.4280	6.481	18.5	6.1899	6	300	16.6	6.36
240	0.09252	30.0	4.93	0	0.4280	6.606	42.2	6.1899	6	300	16.6	7.37
241	0.11329	30.0	4.93	0	0.4280	6.897	54.3	6.3361	6	300	16.6	11.38
242	0.10612	30.0	4.93	0	0.4280	6.095	65.1	6.3361	6	300	16.6	12.40
243	0.10290	30.0	4.93	0	0.4280	6.358	52.9	7.0355	6	300	16.6	11.22
244	0.12757	30.0	4.93	0	0.4280	6.393	7.8	7.0355	6	300	16.6	5.19
245	0.20608	22.0	5.86	0	0.4310	5.593	76.5	7.9549	7	330	19.1	12.50
246	0.19133	22.0	5.86	0	0.4310	5.605	70.2	7.9549	7	330	19.1	18.46
247	0.33983	22.0	5.86	0	0.4310	6.108	34.9	8.0555	7	330	19.1	9.16
248	0.19657	22.0	5.86	0	0.4310	6.226	79.2	8.0555	7	330	19.1	10.15
249	0.16439	22.0	5.86	0	0.4310	6.433	49.1	7.8265	7	330	19.1	9.52
250	0.19073	22.0	5.86	0	0.4310	6.718	17.5	7.8265	7	330	19.1	6.56
251	0.14030	22.0	5.86	0	0.4310	6.487	13.0	7.3967	7	330	19.1	5.90
252	0.21409	22.0	5.86	0	0.4310	6.438	8.9	7.3967	7	330	19.1	3.59
253	0.08221	22.0	5.86	0	0.4310	6.957	6.8	8.9067	7	330	19.1	3.53
254	0.36894	22.0	5.86	0	0.4310	8.259	8.4	8.9067	7	330	19.1	3.54
255	0.04819	80.0	3.64	0	0.3920	6.108	32.0	9.2203	1	315	16.4	6.57
256	0.03548	80.0	3.64	0	0.3920	5.876	19.1	9.2203	1	315	16.4	9.25
257	0.01538	90.0	3.75	0	0.3940	7.454	34.2	6.3361	3	244	15.9	3.11
258	0.61154	20.0	3.97	0	0.6470	8.704	86.9	1.8010	5	264	13.0	5.12

259	0.66351	20.0	3.97	0	0.6470	7.333	100.0	1.8946	5	264	13.0	7.79
260	0.65665	20.0	3.97	0	0.6470	6.842	100.0	2.0107	5	264	13.0	6.90
261	0.54011	20.0	3.97	0	0.6470	7.203	81.8	2.1121	5	264	13.0	9.59
262	0.53412	20.0	3.97	0	0.6470	7.520	89.4	2.1398	5	264	13.0	7.26
263	0.52014	20.0	3.97	0	0.6470	8.398	91.5	2.2885	5	264	13.0	5.91
264	0.82526	20.0	3.97	0	0.6470	7.327	94.5	2.0788	5	264	13.0	11.25
265	0.55007	20.0	3.97	0	0.6470	7.206	91.6	1.9301	5	264	13.0	8.10
266	0.76162	20.0	3.97	0	0.6470	5.560	62.8	1.9865	5	264	13.0	10.45
267	0.78570	20.0	3.97	0	0.6470	7.014	84.6	2.1329	5	264	13.0	14.79
268	0.57834	20.0	3.97	0	0.5750	8.297	67.0	2.4216	5	264	13.0	7.44
269	0.54050	20.0	3.97	0	0.5750	7.470	52.6	2.8720	5	264	13.0	3.16
270	0.09065	20.0	6.96	1	0.4640	5.920	61.5	3.9175	3	223	18.6	13.65
271	0.29916	20.0	6.96	0	0.4640	5.856	42.1	4.4290	3	223	18.6	13.00
272	0.16211	20.0	6.96	0	0.4640	6.240	16.3	4.4290	3	223	18.6	6.59
273	0.11460	20.0	6.96	0	0.4640	6.538	58.7	3.9175	3	223	18.6	7.73
274	0.22188	20.0	6.96	1	0.4640	7.691	51.8	4.3665	3	223	18.6	6.58
275	0.05644	40.0	6.41	1	0.4470	6.758	32.9	4.0776	4	254	17.6	3.53
276	0.09604	40.0	6.41	0	0.4470	6.854	42.8	4.2673	4	254	17.6	2.98
277	0.10469	40.0	6.41	1	0.4470	7.267	49.0	4.7872	4	254	17.6	6.05
278	0.06127	40.0	6.41	1	0.4470	6.826	27.6	4.8628	4	254	17.6	4.16
279	0.07978	40.0	6.41	0	0.4470	6.482	32.1	4.1403	4	254	17.6	7.19
280	0.21038	20.0	3.33	0	0.4429	6.812	32.2	4.1007	5	216	14.9	4.85
281	0.03578	20.0	3.33	0	0.4429	7.820	64.5	4.6947	5	216	14.9	3.76
282	0.03705	20.0	3.33	0	0.4429	6.968	37.2	5.2447	5	216	14.9	4.59
283	0.06129	20.0	3.33	1	0.4429	7.645	49.7	5.2119	5	216	14.9	3.01
284	0.01501	90.0	1.21	1	0.4010	7.923	24.8	5.8850	1	198	13.6	3.16
285	0.00906	90.0	2.97	0	0.4000	7.088	20.8	7.3073	1	285	15.3	7.85
286	0.01096	55.0	2.25	0	0.3890	6.453	31.9	7.3073	1	300	15.3	8.23
287	0.01965	80.0	1.76	0	0.3850	6.230	31.5	9.0892	1	241	18.2	12.93
288	0.03871	52.5	5.32	0	0.4050	6.209	31.3	7.3172	6	293	16.6	7.14
289	0.04590	52.5	5.32	0	0.4050	6.315	45.6	7.3172	6	293	16.6	7.60
290	0.04297	52.5	5.32	0	0.4050	6.565	22.9	7.3172	6	293	16.6	9.51
291	0.03502	80.0	4.95	0	0.4110	6.861	27.9	5.1167	4	245	19.2	3.33
292	0.07886	80.0	4.95	0	0.4110	7.148	27.7	5.1167	4	245	19.2	3.56
293	0.03615	80.0	4.95	0	0.4110	6.630	23.4	5.1167	4	245	19.2	4.70
294	0.08265	0.0	13.92	0	0.4370	6.127	18.4	5.5027	4	289	16.0	8.58
295	0.08199	0.0	13.92	0	0.4370	6.009	42.3	5.5027	4	289	16.0	10.40
296	0.12932	0.0	13.92	0	0.4370	6.678	31.1	5.9604	4	289	16.0	6.27
297	0.05372	0.0	13.92	0	0.4370	6.549	51.0	5.9604	4	289	16.0	7.39
298	0.14103	0.0	13.92	0	0.4370	5.790	58.0	6.3200	4	289	16.0	15.84
299	0.06466	70.0	2.24	0	0.4000	6.345	20.1	7.8278	5	358	14.8	4.97
300	0.05561	70.0	2.24	0	0.4000	7.041	10.0	7.8278	5	358	14.8	4.74
301	0.04417	70.0	2.24	0	0.4000	6.871	47.4	7.8278	5	358	14.8	6.07

302	0.03537	34.0	6.09	0	0.4330	6.590	40.4	5.4917	7	329	16.1	9.50
303	0.09266	34.0	6.09	0	0.4330	6.495	18.4	5.4917	7	329	16.1	8.67
304	0.10000	34.0	6.09	0	0.4330	6.982	17.7	5.4917	7	329	16.1	4.86
305	0.05515	33.0	2.18	0	0.4720	7.236	41.1	4.0220	7	222	18.4	6.93
306	0.05479	33.0	2.18	0	0.4720	6.616	58.1	3.3700	7	222	18.4	8.93
307	0.07503	33.0	2.18	0	0.4720	7.420	71.9	3.0992	7	222	18.4	6.47
308	0.04932	33.0	2.18	0	0.4720	6.849	70.3	3.1827	7	222	18.4	7.53
309	0.49298	0.0	9.90	0	0.5440	6.635	82.5	3.3175	4	304	18.4	4.54
310	0.34940	0.0	9.90	0	0.5440	5.972	76.7	3.1025	4	304	18.4	9.97
311	2.63548	0.0	9.90	0	0.5440	4.973	37.8	2.5194	4	304	18.4	12.64
312	0.79041	0.0	9.90	0	0.5440	6.122	52.8	2.6403	4	304	18.4	5.98
313	0.26169	0.0	9.90	0	0.5440	6.023	90.4	2.8340	4	304	18.4	11.72
314	0.26938	0.0	9.90	0	0.5440	6.266	82.8	3.2628	4	304	18.4	7.90
315	0.36920	0.0	9.90	0	0.5440	6.567	87.3	3.6023	4	304	18.4	9.28
316	0.25356	0.0	9.90	0	0.5440	5.705	77.7	3.9450	4	304	18.4	11.50
317	0.31827	0.0	9.90	0	0.5440	5.914	83.2	3.9986	4	304	18.4	18.33
318	0.24522	0.0	9.90	0	0.5440	5.782	71.7	4.0317	4	304	18.4	15.94
319	0.40202	0.0	9.90	0	0.5440	6.382	67.2	3.5325	4	304	18.4	10.36
320	0.47547	0.0	9.90	0	0.5440	6.113	58.8	4.0019	4	304	18.4	12.73
321	0.16760	0.0	7.38	0	0.4930	6.426	52.3	4.5404	5	287	19.6	7.20
322	0.18159	0.0	7.38	0	0.4930	6.376	54.3	4.5404	5	287	19.6	6.87
323	0.35114	0.0	7.38	0	0.4930	6.041	49.9	4.7211	5	287	19.6	7.70
324	0.28392	0.0	7.38	0	0.4930	5.708	74.3	4.7211	5	287	19.6	11.74
325	0.34109	0.0	7.38	0	0.4930	6.415	40.1	4.7211	5	287	19.6	6.12
326	0.19186	0.0	7.38	0	0.4930	6.431	14.7	5.4159	5	287	19.6	5.08
327	0.30347	0.0	7.38	0	0.4930	6.312	28.9	5.4159	5	287	19.6	6.15
328	0.24103	0.0	7.38	0	0.4930	6.083	43.7	5.4159	5	287	19.6	12.79
329	0.06617	0.0	3.24	0	0.4600	5.868	25.8	5.2146	4	430	16.9	9.97
330	0.06724	0.0	3.24	0	0.4600	6.333	17.2	5.2146	4	430	16.9	7.34
331	0.04544	0.0	3.24	0	0.4600	6.144	32.2	5.8736	4	430	16.9	9.09
332	0.05023	35.0	6.06	0	0.4379	5.706	28.4	6.6407	1	304	16.9	12.43
333	0.03466	35.0	6.06	0	0.4379	6.031	23.3	6.6407	1	304	16.9	7.83
334	0.05083	0.0	5.19	0	0.5150	6.316	38.1	6.4584	5	224	20.2	5.68
335	0.03738	0.0	5.19	0	0.5150	6.310	38.5	6.4584	5	224	20.2	6.75
336	0.03961	0.0	5.19	0	0.5150	6.037	34.5	5.9853	5	224	20.2	8.01
337	0.03427	0.0	5.19	0	0.5150	5.869	46.3	5.2311	5	224	20.2	9.80
338	0.03041	0.0	5.19	0	0.5150	5.895	59.6	5.6150	5	224	20.2	10.56
339	0.03306	0.0	5.19	0	0.5150	6.059	37.3	4.8122	5	224	20.2	8.51
340	0.05497	0.0	5.19	0	0.5150	5.985	45.4	4.8122	5	224	20.2	9.74
341	0.06151	0.0	5.19	0	0.5150	5.968	58.5	4.8122	5	224	20.2	9.29
342	0.01301	35.0	1.52	0	0.4420	7.241	49.3	7.0379	1	284	15.5	5.49
343	0.02498	0.0	1.89	0	0.5180	6.540	59.7	6.2669	1	422	15.9	8.65
344	0.02543	55.0	3.78	0	0.4840	6.696	56.4	5.7321	5	370	17.6	7.18

345	0.03049	55.0	3.78	0	0.4840	6.874	28.1	6.4654	5	370	17.6	4.61
346	0.03113	0.0	4.39	0	0.4420	6.014	48.5	8.0136	3	352	18.8	10.53
347	0.06162	0.0	4.39	0	0.4420	5.898	52.3	8.0136	3	352	18.8	12.67
348	0.01870	85.0	4.15	0	0.4290	6.516	27.7	8.5353	4	351	17.9	6.36
349	0.01501	80.0	2.01	0	0.4350	6.635	29.7	8.3440	4	280	17.0	5.99
350	0.02899	40.0	1.25	0	0.4290	6.939	34.5	8.7921	1	335	19.7	5.89
351	0.06211	40.0	1.25	0	0.4290	6.490	44.4	8.7921	1	335	19.7	5.98
352	0.07950	60.0	1.69	0	0.4110	6.579	35.9	10.7103	4	411	18.3	5.49
353	0.07244	60.0	1.69	0	0.4110	5.884	18.5	10.7103	4	411	18.3	7.79
354	0.01709	90.0	2.02	0	0.4100	6.728	36.1	12.1265	5	187	17.0	4.50
355	0.04301	80.0	1.91	0	0.4130	5.663	21.9	10.5857	4	334	22.0	8.05
356	0.10659	80.0	1.91	0	0.4130	5.936	19.5	10.5857	4	334	22.0	5.57
357	8.98296	0.0	18.10	1	0.7700	6.212	97.4	2.1222	24	666	20.2	17.60
358	3.84970	0.0	18.10	1	0.7700	6.395	91.0	2.5052	24	666	20.2	13.27
359	5.20177	0.0	18.10	1	0.7700	6.127	83.4	2.7227	24	666	20.2	11.48
360	4.26131	0.0	18.10	0	0.7700	6.112	81.3	2.5091	24	666	20.2	12.67
361	4.54192	0.0	18.10	0	0.7700	6.398	88.0	2.5182	24	666	20.2	7.79
362	3.83684	0.0	18.10	0	0.7700	6.251	91.1	2.2955	24	666	20.2	14.19
363	3.67822	0.0	18.10	0	0.7700	5.362	96.2	2.1036	24	666	20.2	10.19
364	4.22239	0.0	18.10	1	0.7700	5.803	89.0	1.9047	24	666	20.2	14.64
365	3.47428	0.0	18.10	1	0.7180	8.780	82.9	1.9047	24	666	20.2	5.29
366	4.55587	0.0	18.10	0	0.7180	3.561	87.9	1.6132	24	666	20.2	7.12
367	3.69695	0.0	18.10	0	0.7180	4.963	91.4	1.7523	24	666	20.2	14.00
368	13.52220	0.0	18.10	0	0.6310	3.863	100.0	1.5106	24	666	20.2	13.33
369	4.89822	0.0	18.10	0	0.6310	4.970	100.0	1.3325	24	666	20.2	3.26
370	5.66998	0.0	18.10	1	0.6310	6.683	96.8	1.3567	24	666	20.2	3.73
371	6.53876	0.0	18.10	1	0.6310	7.016	97.5	1.2024	24	666	20.2	2.96
372	9.23230	0.0	18.10	0	0.6310	6.216	100.0	1.1691	24	666	20.2	9.53
373	8.26725	0.0	18.10	1	0.6680	5.875	89.6	1.1296	24	666	20.2	8.88
374	11.10810	0.0	18.10	0	0.6680	4.906	100.0	1.1742	24	666	20.2	34.77
375	18.49820	0.0	18.10	0	0.6680	4.138	100.0	1.1370	24	666	20.2	37.97
376	19.60910	0.0	18.10	0	0.6710	7.313	97.9	1.3163	24	666	20.2	13.44
377	15.28800	0.0	18.10	0	0.6710	6.649	93.3	1.3449	24	666	20.2	23.24
378	9.82349	0.0	18.10	0	0.6710	6.794	98.8	1.3580	24	666	20.2	21.24
379	23.64820	0.0	18.10	0	0.6710	6.380	96.2	1.3861	24	666	20.2	23.69
380	17.86670	0.0	18.10	0	0.6710	6.223	100.0	1.3861	24	666	20.2	21.78
381	88.97620	0.0	18.10	0	0.6710	6.968	91.9	1.4165	24	666	20.2	17.21
382	15.87440	0.0	18.10	0	0.6710	6.545	99.1	1.5192	24	666	20.2	21.08
383	9.18702	0.0	18.10	0	0.7000	5.536	100.0	1.5804	24	666	20.2	23.60
384	7.99248	0.0	18.10	0	0.7000	5.520	100.0	1.5331	24	666	20.2	24.56
385	20.08490	0.0	18.10	0	0.7000	4.368	91.2	1.4395	24	666	20.2	30.63
386	16.81180	0.0	18.10	0	0.7000	5.277	98.1	1.4261	24	666	20.2	30.81
387	24.39380	0.0	18.10	0	0.7000	4.652	100.0	1.4672	24	666	20.2	28.28

388	22.59710	0.0	18.10	0	0.7000	5.000	89.5	1.5184	24	666	20.2	31.99
389	14.33370	0.0	18.10	0	0.7000	4.880	100.0	1.5895	24	666	20.2	30.62
390	8.15174	0.0	18.10	0	0.7000	5.390	98.9	1.7281	24	666	20.2	20.85
391	6.96215	0.0	18.10	0	0.7000	5.713	97.0	1.9265	24	666	20.2	17.11
392	5.29305	0.0	18.10	0	0.7000	6.051	82.5	2.1678	24	666	20.2	18.76
393	11.57790	0.0	18.10	0	0.7000	5.036	97.0	1.7700	24	666	20.2	25.68
394	8.64476	0.0	18.10	0	0.6930	6.193	92.6	1.7912	24	666	20.2	15.17
395	13.35980	0.0	18.10	0	0.6930	5.887	94.7	1.7821	24	666	20.2	16.35
396	8.71675	0.0	18.10	0	0.6930	6.471	98.8	1.7257	24	666	20.2	17.12
397	5.87205	0.0	18.10	0	0.6930	6.405	96.0	1.6768	24	666	20.2	19.37
398	7.67202	0.0	18.10	0	0.6930	5.747	98.9	1.6334	24	666	20.2	19.92
399	38.35180	0.0	18.10	0	0.6930	5.453	100.0	1.4896	24	666	20.2	30.59
400	9.91655	0.0	18.10	0	0.6930	5.852	77.8	1.5004	24	666	20.2	29.97
401	25.04610	0.0	18.10	0	0.6930	5.987	100.0	1.5888	24	666	20.2	26.77
402	14.23620	0.0	18.10	0	0.6930	6.343	100.0	1.5741	24	666	20.2	20.32
403	9.59571	0.0	18.10	0	0.6930	6.404	100.0	1.6390	24	666	20.2	20.31
404	24.80170	0.0	18.10	0	0.6930	5.349	96.0	1.7028	24	666	20.2	19.77
405	41.52920	0.0	18.10	0	0.6930	5.531	85.4	1.6074	24	666	20.2	27.38
406	67.92080	0.0	18.10	0	0.6930	5.683	100.0	1.4254	24	666	20.2	22.98
407	20.71620	0.0	18.10	0	0.6590	4.138	100.0	1.1781	24	666	20.2	23.34
408	11.95110	0.0	18.10	0	0.6590	5.608	100.0	1.2852	24	666	20.2	12.13
409	7.40389	0.0	18.10	0	0.5970	5.617	97.9	1.4547	24	666	20.2	26.40
410	14.43830	0.0	18.10	0	0.5970	6.852	100.0	1.4655	24	666	20.2	19.78
411	51.13580	0.0	18.10	0	0.5970	5.757	100.0	1.4130	24	666	20.2	10.11
412	14.05070	0.0	18.10	0	0.5970	6.657	100.0	1.5275	24	666	20.2	21.22
413	18.81100	0.0	18.10	0	0.5970	4.628	100.0	1.5539	24	666	20.2	34.37
414	28.65580	0.0	18.10	0	0.5970	5.155	100.0	1.5894	24	666	20.2	20.08
415	45.74610	0.0	18.10	0	0.6930	4.519	100.0	1.6582	24	666	20.2	36.98
416	18.08460	0.0	18.10	0	0.6790	6.434	100.0	1.8347	24	666	20.2	29.05
417	10.83420	0.0	18.10	0	0.6790	6.782	90.8	1.8195	24	666	20.2	25.79
418	25.94060	0.0	18.10	0	0.6790	5.304	89.1	1.6475	24	666	20.2	26.64
419	73.53410	0.0	18.10	0	0.6790	5.957	100.0	1.8026	24	666	20.2	20.62
420	11.81230	0.0	18.10	0	0.7180	6.824	76.5	1.7940	24	666	20.2	22.74
421	11.08740	0.0	18.10	0	0.7180	6.411	100.0	1.8589	24	666	20.2	15.02
422	7.02259	0.0	18.10	0	0.7180	6.006	95.3	1.8746	24	666	20.2	15.70
423	12.04820	0.0	18.10	0	0.6140	5.648	87.6	1.9512	24	666	20.2	14.10
424	7.05042	0.0	18.10	0	0.6140	6.103	85.1	2.0218	24	666	20.2	23.29
425	8.79212	0.0	18.10	0	0.5840	5.565	70.6	2.0635	24	666	20.2	17.16
426	15.86030	0.0	18.10	0	0.6790	5.896	95.4	1.9096	24	666	20.2	24.39
427	12.24720	0.0	18.10	0	0.5840	5.837	59.7	1.9976	24	666	20.2	15.69
428	37.66190	0.0	18.10	0	0.6790	6.202	78.7	1.8629	24	666	20.2	14.52
429	7.36711	0.0	18.10	0	0.6790	6.193	78.1	1.9356	24	666	20.2	21.52
430	9.33889	0.0	18.10	0	0.6790	6.380	95.6	1.9682	24	666	20.2	24.08

431	8.49213	0.0	18.10	0	0.5840	6.348	86.1	2.0527	24	666	20.2	17.64
432	10.06230	0.0	18.10	0	0.5840	6.833	94.3	2.0882	24	666	20.2	19.69
433	6.44405	0.0	18.10	0	0.5840	6.425	74.8	2.2004	24	666	20.2	12.03
434	5.58107	0.0	18.10	0	0.7130	6.436	87.9	2.3158	24	666	20.2	16.22
435	13.91340	0.0	18.10	0	0.7130	6.208	95.0	2.2222	24	666	20.2	15.17
436	11.16040	0.0	18.10	0	0.7400	6.629	94.6	2.1247	24	666	20.2	23.27
437	14.42080	0.0	18.10	0	0.7400	6.461	93.3	2.0026	24	666	20.2	18.05
438	15.17720	0.0	18.10	0	0.7400	6.152	100.0	1.9142	24	666	20.2	26.45
439	13.67810	0.0	18.10	0	0.7400	5.935	87.9	1.8206	24	666	20.2	34.02
440	9.39063	0.0	18.10	0	0.7400	5.627	93.9	1.8172	24	666	20.2	22.88
441	22.05110	0.0	18.10	0	0.7400	5.818	92.4	1.8662	24	666	20.2	22.11
442	9.72418	0.0	18.10	0	0.7400	6.406	97.2	2.0651	24	666	20.2	19.52
443	5.66637	0.0	18.10	0	0.7400	6.219	100.0	2.0048	24	666	20.2	16.59
444	9.96654	0.0	18.10	0	0.7400	6.485	100.0	1.9784	24	666	20.2	18.85
445	12.80230	0.0	18.10	0	0.7400	5.854	96.6	1.8956	24	666	20.2	23.79
446	10.67180	0.0	18.10	0	0.7400	6.459	94.8	1.9879	24	666	20.2	23.98
447	6.28807	0.0	18.10	0	0.7400	6.341	96.4	2.0720	24	666	20.2	17.79
448	9.92485	0.0	18.10	0	0.7400	6.251	96.6	2.1980	24	666	20.2	16.44
449	9.32909	0.0	18.10	0	0.7130	6.185	98.7	2.2616	24	666	20.2	18.13
450	7.52601	0.0	18.10	0	0.7130	6.417	98.3	2.1850	24	666	20.2	19.31
451	6.71772	0.0	18.10	0	0.7130	6.749	92.6	2.3236	24	666	20.2	17.44
452	5.44114	0.0	18.10	0	0.7130	6.655	98.2	2.3552	24	666	20.2	17.73
453	5.09017	0.0	18.10	0	0.7130	6.297	91.8	2.3682	24	666	20.2	17.27
454	8.24809	0.0	18.10	0	0.7130	7.393	99.3	2.4527	24	666	20.2	16.74
455	9.51363	0.0	18.10	0	0.7130	6.728	94.1	2.4961	24	666	20.2	18.71
456	4.75237	0.0	18.10	0	0.7130	6.525	86.5	2.4358	24	666	20.2	18.13
457	4.66883	0.0	18.10	0	0.7130	5.976	87.9	2.5806	24	666	20.2	19.01
458	8.20058	0.0	18.10	0	0.7130	5.936	80.3	2.7792	24	666	20.2	16.94
459	7.75223	0.0	18.10	0	0.7130	6.301	83.7	2.7831	24	666	20.2	16.23
460	6.80117	0.0	18.10	0	0.7130	6.081	84.4	2.7175	24	666	20.2	14.70
461	4.81213	0.0	18.10	0	0.7130	6.701	90.0	2.5975	24	666	20.2	16.42
462	3.69311	0.0	18.10	0	0.7130	6.376	88.4	2.5671	24	666	20.2	14.65
463	6.65492	0.0	18.10	0	0.7130	6.317	83.0	2.7344	24	666	20.2	13.99
464	5.82115	0.0	18.10	0	0.7130	6.513	89.9	2.8016	24	666	20.2	10.29
465	7.83932	0.0	18.10	0	0.6550	6.209	65.4	2.9634	24	666	20.2	13.22
466	3.16360	0.0	18.10	0	0.6550	5.759	48.2	3.0665	24	666	20.2	14.13
467	3.77498	0.0	18.10	0	0.6550	5.952	84.7	2.8715	24	666	20.2	17.15
468	4.42228	0.0	18.10	0	0.5840	6.003	94.5	2.5403	24	666	20.2	21.32
469	15.57570	0.0	18.10	0	0.5800	5.926	71.0	2.9084	24	666	20.2	18.13
470	13.07510	0.0	18.10	0	0.5800	5.713	56.7	2.8237	24	666	20.2	14.76
471	4.34879	0.0	18.10	0	0.5800	6.167	84.0	3.0334	24	666	20.2	16.29
472	4.03841	0.0	18.10	0	0.5320	6.229	90.7	3.0993	24	666	20.2	12.87
473	3.56868	0.0	18.10	0	0.5800	6.437	75.0	2.8965	24	666	20.2	14.36

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474  4.64689   0.0 18.10    0 0.6140 6.980  67.6  2.5329  24 666    20.2 11.66
475  8.05579   0.0 18.10    0 0.5840 5.427  95.4  2.4298  24 666    20.2 18.14
476  6.39312   0.0 18.10    0 0.5840 6.162  97.4  2.2060  24 666    20.2 24.10
477  4.87141   0.0 18.10    0 0.6140 6.484  93.6  2.3053  24 666    20.2 18.68
478 15.02340   0.0 18.10    0 0.6140 5.304  97.3  2.1007  24 666    20.2 24.91
479 10.23300   0.0 18.10    0 0.6140 6.185  96.7  2.1705  24 666    20.2 18.03
480 14.33370   0.0 18.10    0 0.6140 6.229  88.0  1.9512  24 666    20.2 13.11
481  5.82401   0.0 18.10    0 0.5320 6.242  64.7  3.4242  24 666    20.2 10.74
482  5.70818   0.0 18.10    0 0.5320 6.750  74.9  3.3317  24 666    20.2  7.74
483  5.73116   0.0 18.10    0 0.5320 7.061  77.0  3.4106  24 666    20.2  7.01
484  2.81838   0.0 18.10    0 0.5320 5.762  40.3  4.0983  24 666    20.2 10.42
485  2.37857   0.0 18.10    0 0.5830 5.871  41.9  3.7240  24 666    20.2 13.34
486  3.67367   0.0 18.10    0 0.5830 6.312  51.9  3.9917  24 666    20.2 10.58
487  5.69175   0.0 18.10    0 0.5830 6.114  79.8  3.5459  24 666    20.2 14.98
488  4.83567   0.0 18.10    0 0.5830 5.905  53.2  3.1523  24 666    20.2 11.45
489  0.15086   0.0 27.74    0 0.6090 5.454  92.7  1.8209   4 711    20.1 18.06
490  0.18337   0.0 27.74    0 0.6090 5.414  98.3  1.7554   4 711    20.1 23.97
491  0.20746   0.0 27.74    0 0.6090 5.093  98.0  1.8226   4 711    20.1 29.68
492  0.10574   0.0 27.74    0 0.6090 5.983  98.8  1.8681   4 711    20.1 18.07
493  0.11132   0.0 27.74    0 0.6090 5.983  83.5  2.1099   4 711    20.1 13.35
494  0.17331   0.0  9.69    0 0.5850 5.707  54.0  2.3817   6 391    19.2 12.01
495  0.27957   0.0  9.69    0 0.5850 5.926  42.6  2.3817   6 391    19.2 13.59
496  0.17899   0.0  9.69    0 0.5850 5.670  28.8  2.7986   6 391    19.2 17.60
497  0.28960   0.0  9.69    0 0.5850 5.390  72.9  2.7986   6 391    19.2 21.14
498  0.26838   0.0  9.69    0 0.5850 5.794  70.6  2.8927   6 391    19.2 14.10
499  0.23912   0.0  9.69    0 0.5850 6.019  65.3  2.4091   6 391    19.2 12.92
500  0.17783   0.0  9.69    0 0.5850 5.569  73.5  2.3999   6 391    19.2 15.10
501  0.22438   0.0  9.69    0 0.5850 6.027  79.7  2.4982   6 391    19.2 14.33
502  0.06263   0.0 11.93    0 0.5730 6.593  69.1  2.4786   1 273    21.0  9.67
503  0.04527   0.0 11.93    0 0.5730 6.120  76.7  2.2875   1 273    21.0  9.08
504  0.06076   0.0 11.93    0 0.5730 6.976  91.0  2.1675   1 273    21.0  5.64
505  0.10959   0.0 11.93    0 0.5730 6.794  89.3  2.3889   1 273    21.0  6.48
506  0.04741   0.0 11.93    0 0.5730 6.030  80.8  2.5050   1 273    21.0  7.88
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