week 7 notes

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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)</pre>

February 21st

Regularization/Shrinkage estimators

Objective function defined below:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n + \epsilon$$

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

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

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

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

* 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

$$p_{\lambda} = \beta_1^2 + \beta_2^2 + \dots + \beta_p^2$$

2. LASSO regression estimator

$$p_{\lambda} = |\beta_1| + |\beta_2| + \dots + |\beta_p|$$

3. General case in glmnet()

$$p_{\lambda} = |\beta_1|^{\alpha} + |\beta_2|^{\alpha} + \dots + |\beta_n|^{\alpha}$$

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)</pre>
  X <- model.matrix(full_model)[,-1]</pre>
  head(X)
     crim zn indus chas
                                             dis rad tax ptratio lstat
                          nox
                                 rm age
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
                      0 0.469 7.185 61.1 4.9671
3 0.02729 0 7.07
                                                   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)</pre>
  drop_scale <- c(4)</pre>
  include_scale <- all_cols[-drop_scale]</pre>
  for (i in include_scale) { X[,i] <- scale(X[,i]) }</pre>
  head(X)
                             indus chas
        crim
                     zn
                                                nox
                                                           rm
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
                                                  lstat
       dis
                  rad
                             tax
                                     ptratio
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
```

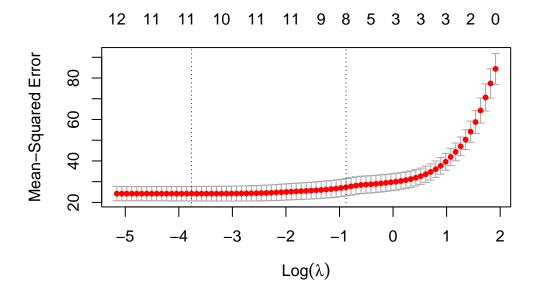
```
lasso <- cv.glmnet(X,y,alpha = 1)
# alpha is exponent for function
lasso</pre>
```

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

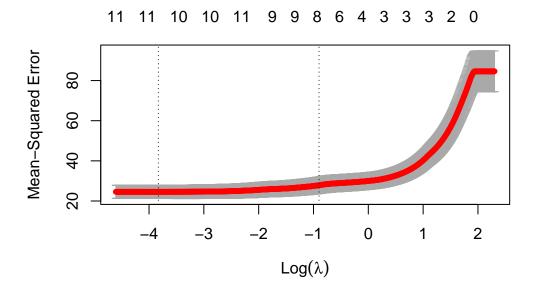
- As lambda increases, the effect that the penalty has on the solution is stronger (the value of p sub lambda also increases)
- If minimizing p_{λ} , want to drop more variables and sparser solutions
- As we go from right to left (lambda increases) the number of variables that are selected decreases (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)</pre>
```



```
lasso_coef <- coef(lasso, s = "lambda.min")</pre>
  # 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"
(Intercept) 22.33621229
crim
            -0.97836981
zn
             0.99821306
indus
             2.84218803
chas
nox
            -2.01913651
             2.61802954
rm
             0.00291066
age
dis
            -3.03203929
rad
             2.16037661
tax
            -1.81521262
ptratio
            -1.98870632
lstat
            -3.89871882
  selected_vars
 [1] "crim"
                "zn"
                          "chas"
                                                          "age"
                                                                     "dis"
                                     "nox"
                                                "rm"
 [8] "rad"
                          "ptratio" "lstat"
                "tax"
  • 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)

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

	${\tt Estimate}$	Std. Error	t value	Pr(> t)	
(Intercept)	22.3350	0.2213	100.914	< 2e-16	***
<pre>X[, selected_vars]crim</pre>	-1.0462	0.2834	-3.691	0.000248	***
<pre>X[, selected_vars]zn</pre>	1.0878	0.3215	3.383	0.000773	***
<pre>X[, selected_vars]chas</pre>	2.8591	0.8647	3.307	0.001013	**
<pre>X[, selected_vars]nox</pre>	-2.1478	0.4296	-4.999	8.01e-07	***
<pre>X[, selected_vars]rm</pre>	2.5646	0.2938	8.728	< 2e-16	***
<pre>X[, selected_vars]age</pre>	0.1016	0.3748	0.271	0.786563	
<pre>X[, selected_vars]dis</pre>	-3.1585	0.4146	-7.617	1.33e-13	***
<pre>X[, selected_vars]rad</pre>	2.4850	0.5593	4.443	1.09e-05	***
<pre>X[, selected_vars]tax</pre>	-2.0764	0.5749	-3.611	0.000336	***
<pre>X[, selected_vars]ptratio</pre>	-2.0217	0.2836	-7.130	3.59e-12	***
<pre>X[, selected_vars]lstat</pre>	-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

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

where $L(\beta_0, \beta_2, ..., \beta_p)$ is referred to as the loss function. If we want to find the values of $(\beta_0, \beta_2, ..., \beta_p)$ 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)
```

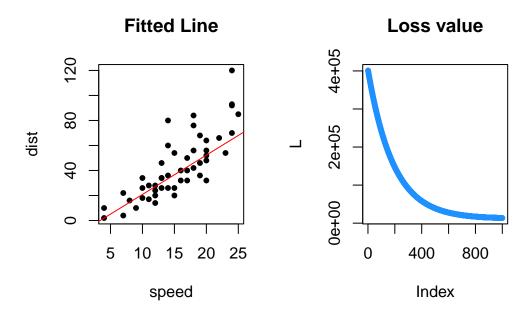
Creating a loss function that calculates mean squared error

```
Loss <- function(b,x,y) {</pre>
    squares <- (y - b[1] - b[2]*x)^2
    return(sum(squares))
  b <- rnorm(2)
  Loss(b, cars$speed, cars$dist)
[1] 84799.88
  # define a function to compute the gradients
  grad <- function(b, Loss, x,y, eps=1e-5){</pre>
    b0_{up} \leftarrow Loss(c(b[1]+eps, b[2]),x,y)
    b0_{dn} \leftarrow Loss(c(b[1]-eps, b[2]),x,y)
    b1_{up} \leftarrow Loss(c(b[1], b[2]+eps),x,y)
    b1_{dn} \leftarrow Loss(c(b[1], b[2]-eps),x,y)
    grad_b0_L <- (b0_up - b0_dn) / (2 * eps)</pre>
    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
  steps <- 1000
  L <- rep(Inf, steps)</pre>
  eta <- 1e-7
  b <- 10 * rnorm(2)
  for (i in 1:steps){
    b <- b - eta * grad(b, Loss, cars$speed, cars$dist)</pre>
    L[i] <- Loss(b, cars$speed, cars$dist)</pre>
  }
```

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

```
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

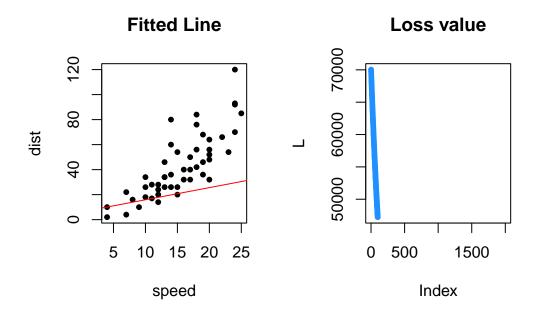
```
options(repr.plot.width=12, repr.plot.height=7)
steps <- 2000
L <- rep(Inf, steps)
eta <- 1e-7
b <- 10 * rnorm(2)

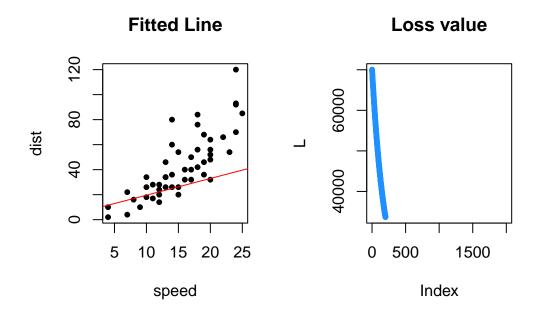
for (i in 1:steps){
  b <- b - eta * grad(b, Loss, cars$speed, cars$dist)</pre>
```

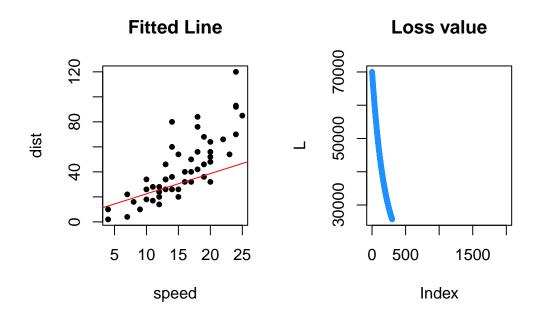
```
L[i] <- Loss(b, cars$speed, cars$dist)

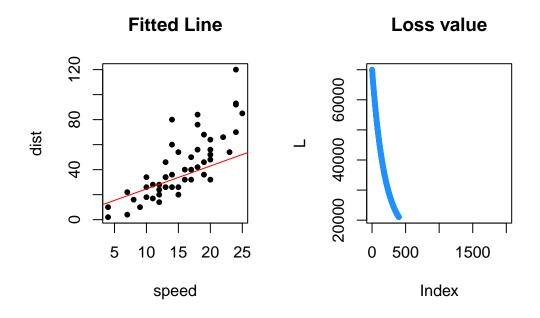
if (i %% 100 == 0) {
    par(mfrow=c(1,2))
    # Plot the final result
    plot(dist ~ speed, cars, pch=20, main = "Fitted Line")
    abline(b, col = 'red')

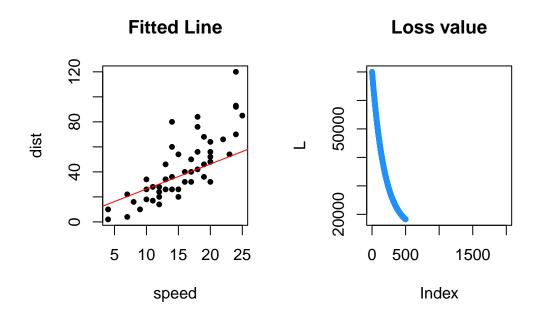
# Plot the change in loss function value
    plot(L, type ='b', pch=20, col='dodgerblue', main='Loss value')
}
</pre>
```

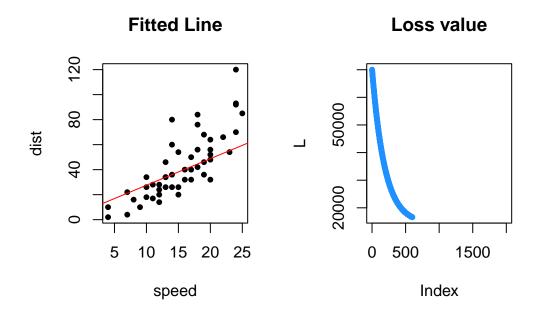


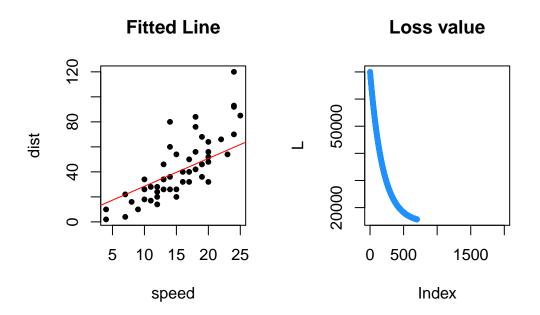


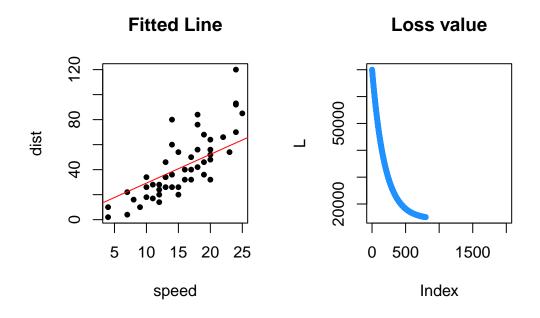


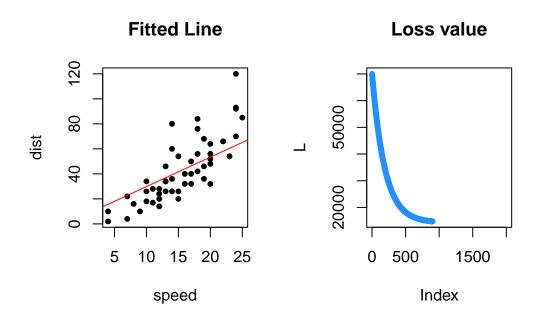


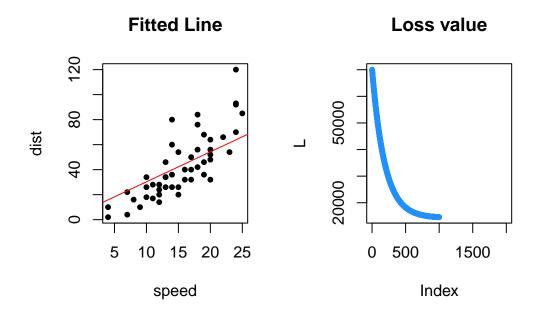


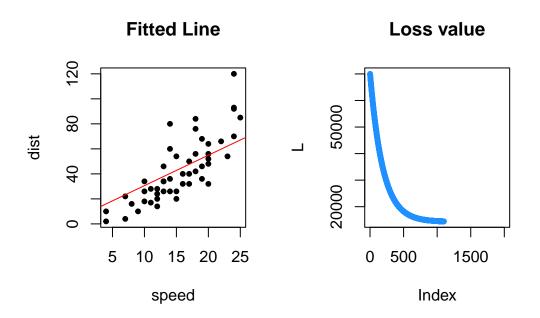


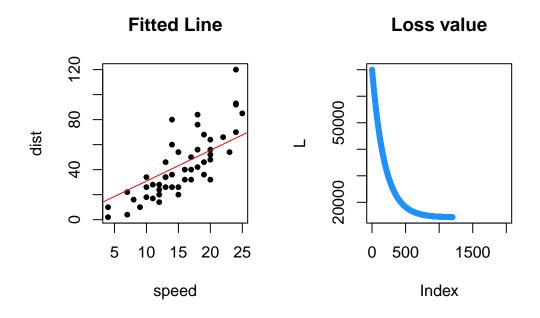


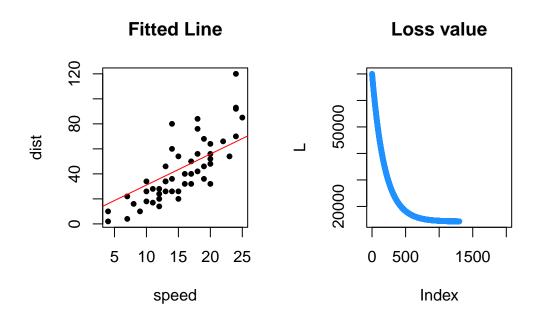


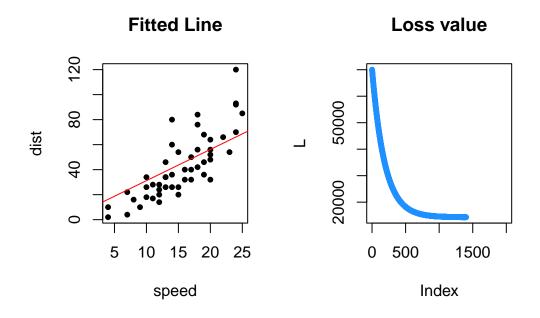


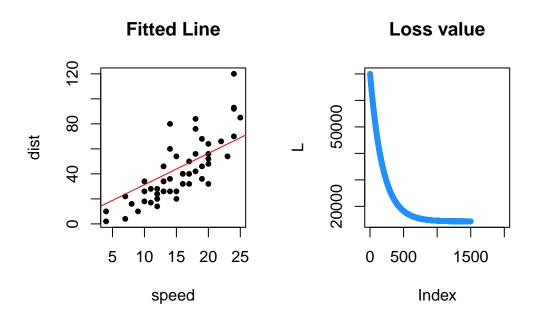


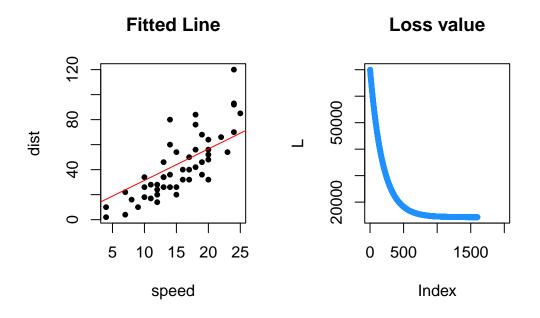


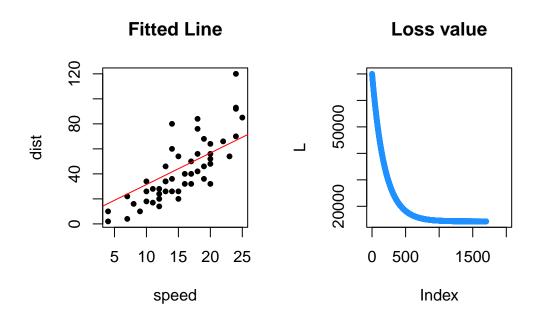


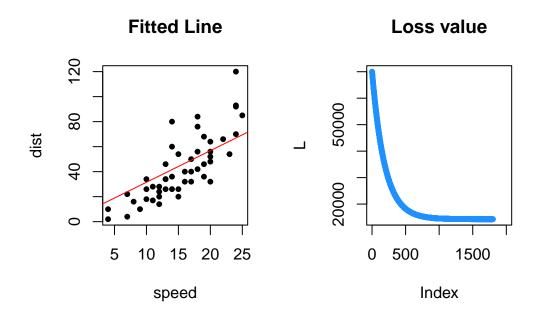


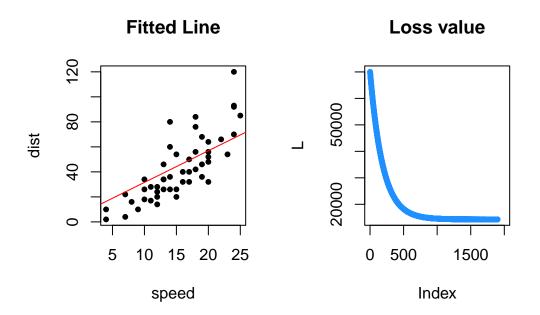


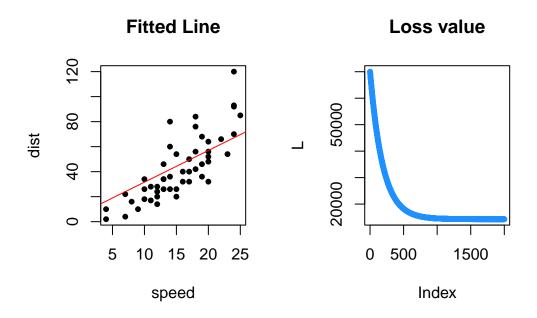












Thursday, Feb 23



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
- \bullet 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

```
# 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)</pre>
torch_tensor
-0.7279
-0.1752
0.9803
1.1084
0.6401
[ CPUFloatType{5,1} ][ requires_grad = TRUE ]
  • matrix = 2D tensor
  • vector = 1D tensor
  # sqrt(sum(as_array(x)^2)^10 is what torch_norm does
  f <- function(x){</pre>
    torch_norm(x)^10
  }
  y \leftarrow f(x)
  У
torch_tensor
315.086
[ CPUFloatType{} ][ grad_fn = <PowBackward0> ]
  # this stops compiler from keeping track of changes to x & start computing gradients
  y$backward()
  x$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)</pre>
  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)</pre>
  у
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) {</pre>
    sum(x*y)
  z \leftarrow f(x,y)
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

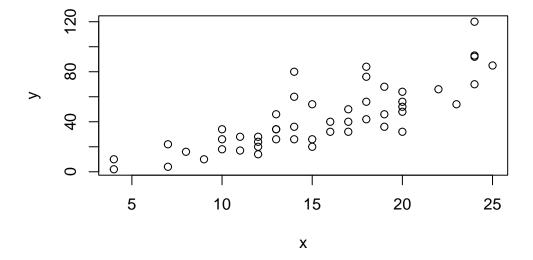
1.3054

-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)</pre>
```



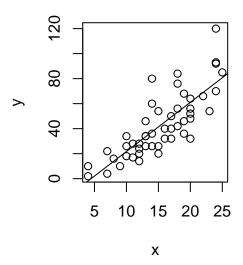
```
b <- torch_zeros(c(2,1), dtype=torch_float(), requires_grad= TRUE)
b</pre>
```

```
torch_tensor
0
[ CPUFloatType{2,1} ][ requires_grad = TRUE ]
  loss <- nn_mse_loss()</pre>
  b <- torch_zeros(c(2,1), dtype=torch_float(), requires_grad = TRUE)</pre>
  steps <- 5000
  L <- rep(Inf, steps)</pre>
  eta <- 0.5
  optimizer <- optim_adam(b, lr=eta)</pre>
  # 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 1 (want to compute gradient with respect to loss)
    1 <- loss(y_hat,y)</pre>
    L[i] <- l$item()
    optimizer$zero_grad()
    # tells to stop here and take gradient from here
    1$backward()
    # tells to take step in direction of negative gradient for thing inside optimizer
    optimizer$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
                 Loss value: 1759.53002929688
Iteration: 2
                 Loss value: 1174.45300292969
Iteration: 3
                 Loss value: 742.353759765625
Iteration: 4
Iteration: 5
                 Loss value: 457.703643798828
                 Loss value: 307.684936523438
Iteration: 6
Iteration: 7
                 Loss value: 270.263397216797
Iteration: 8
                 Loss value: 314.067993164062
```

```
Iteration: 9
                 Loss value: 401.761566162109
                 Loss value: 496.908325195312
Iteration: 10
Iteration: 200
                 Loss value: 231.474166870117
Iteration: 400
                 Loss value: 227.114730834961
                 Loss value: 227.070495605469
Iteration: 600
Iteration: 800
                 Loss value: 227.070404052734
Iteration: 1000
                Loss value: 227.070404052734
Iteration: 1200
                Loss value: 227.070404052734
Iteration: 1400
                Loss value: 227.070404052734
                Loss value: 227.070404052734
Iteration: 1600
Iteration: 1800
                Loss value: 227.070404052734
Iteration: 2000
                Loss value: 227.070404052734
                Loss value: 227.070404052734
Iteration: 2200
                Loss value: 227.070434570312
Iteration: 2400
                Loss value: 227.070434570312
Iteration: 2600
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)
```

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

```
k < -5
  fold <- sample(1:nrow(df), nrow(df)/5)</pre>
  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
                 4 160 479 111 134 285 400 87 504 250 198 339 215 293
                                                                            51 477
           11
 [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
                                 44 107 345 369 29
                            86
  • AIC is a goodness of fit parameter (similar to \mathbb{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)
  train <- df %>% slice(-fold)
  test <- df %>% slice(fold)
  model <- lm(medv ~., data = train)</pre>
  summary(model)
Call:
lm(formula = medv ~ ., data = train)
Residuals:
     Min
                1Q
                     Median
                                   ЗQ
                                            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 ***
                          0.040271 -2.759 0.006073 **
crim
             -0.111102
              0.043026
                          0.015500
                                      2.776 0.005769 **
zn
                                      0.733 0.463987
indus
              0.050516
                          0.068916
```

4.361545 -4.028 6.76e-05 ***

3.434 0.000658 ***

8.496 4.13e-16 ***

0.493 0.622538

3.316768

4.073586

0.007568

-17.567133

chas

nox

rm

age

0.965871

0.479453

0.015361

```
-1.376027
                         0.229657 -5.992 4.71e-09 ***
dis
             0.265253
                         0.074860 3.543 0.000443 ***
rad
             -0.012673
                         0.004126 -3.072 0.002278 **
tax
             -0.946660
                         0.154025 -6.146 1.95e-09 ***
ptratio
                         0.059614 -9.103 < 2e-16 ***
lstat
             -0.542665
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
  y_test <- predict(model, newdata = test)</pre>
  # mean squared prediction error
  mspe <- mean((test$medv - y_test)^2)</pre>
  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

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

```
df_folds <- list()

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

df_folds</pre>
```

[[1]] [[1]]\$train

```
zn indus chas
                                                         dis rad tax ptratio 1stat
        crim
                                   nox
                                          rm
                                                age
1
     0.00632
              18.0
                     2.31
                              0 0.5380 6.575
                                               65.2
                                                     4.0900
                                                               1 296
                                                                         15.3
                                                                               4.98
                     7.07
                                                                               9.14
2
     0.02731
                0.0
                              0 0.4690 6.421
                                               78.9
                                                     4.9671
                                                               2 242
                                                                         17.8
3
     0.02729
                     7.07
                              0 0.4690 7.185
                                               61.1
                                                     4.9671
                                                               2 242
                                                                         17.8 4.03
                0.0
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
                              0 0.5240 6.172
8
     0.14455
              12.5
                     7.87
                                               96.1
                                                     5.9505
                                                               5 311
                                                                         15.2 19.15
     0.21124
              12.5
                     7.87
                              0 0.5240 5.631 100.0
                                                     6.0821
                                                               5 311
                                                                         15.2 29.93
9
                              0 0.5240 6.004
10
     0.17004
              12.5
                     7.87
                                               85.9
                                                     6.5921
                                                               5 311
                                                                         15.2 17.10
     0.22489
              12.5
                     7.87
                              0 0.5240 6.377
                                               94.3
                                                     6.3467
                                                               5 311
                                                                         15.2 20.45
11
12
     0.11747
              12.5
                     7.87
                              0 0.5240 6.009
                                               82.9
                                                     6.2267
                                                               5 311
                                                                         15.2 13.27
              12.5
                     7.87
                              0 0.5240 5.889
                                                     5.4509
13
     0.09378
                                               39.0
                                                               5 311
                                                                         15.2 15.71
                                                                         21.0 8.26
14
     0.62976
                     8.14
                              0 0.5380 5.949
                                               61.8
                                                     4.7075
                                                               4 307
                0.0
                     8.14
                              0 0.5380 6.096
15
     0.63796
                0.0
                                               84.5
                                                     4.4619
                                                               4 307
                                                                         21.0 10.26
                     8.14
     0.62739
                              0 0.5380 5.834
                                               56.5
                                                     4.4986
                                                               4 307
                                                                         21.0 8.47
16
                0.0
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
                              0 0.5380 5.456
19
     0.80271
                0.0
                     8.14
                                               36.6
                                                     3.7965
                                                               4 307
                                                                         21.0 11.69
                              0 0.5380 5.727
20
     0.72580
                0.0
                     8.14
                                               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
                     8.14
                              0 0.5380 5.965
                                               89.2
                                                                         21.0 13.83
     0.85204
                0.0
                                                     4.0123
                                                               4 307
                     8.14
                              0 0.5380 6.142
                                               91.7
23
     1.23247
                0.0
                                                     3.9769
                                                               4 307
                                                                         21.0 18.72
                                                     4.0952
                     8.14
                              0 0.5380 5.813 100.0
24
     0.98843
                0.0
                                                               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
                     8.14
                              0 0.5380 5.599
                                               85.7
                                                     4.4546
                                                               4 307
                                                                         21.0 16.51
                0.0
                0.0 8.14
                              0 0.5380 5.813
                                               90.3
27
     0.67191
                                                     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
                     8.14
                              0 0.5380 6.495
                                               94.4
                                                     4.4547
                                                               4 307
                                                                         21.0 12.80
                0.0
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		0.5380			4.2330		307		22.60
32	1.35472	0.0	8.14		0.5380			4.1750		307		13.04
33	1.38799	0.0	8.14		0.5380		82.0	3.9900		307		27.71
34	1.15172	0.0	8.14		0.5380		95.0	3.7872		307		18.35
35	1.61282	0.0	8.14		0.5380		96.9	3.7598		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		216	18.6	8.05
66	0.03584	80.0	3.37	0	0.3980	6.290	17.8	6.6115		337	16.1	4.67
67	0.04379	80.0	3.37	0	0.3980	5.787	31.1	6.6115		337		10.24
68	0.05789	12.5	6.07	0	0.4090	5.878	21.4	6.4980		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		345	18.9	
71	0.08826		10.81		0.4130		6.6	5.2873		305	19.2	
72	0.15876		10.81		0.4130		17.5	5.2873		305	19.2	
73	0.09164		10.81		0.4130		7.8	5.2873		305	19.2	

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 6.1	76 72.5	2.7301	6	432	17.8	12.04
118	0.15098	0.0 10.01	0	0.5470 6.0	21 82.6	2.7474	6	432	17.8	10.30
119	0.13058	0.0 10.01	0	0.5470 5.8	72 73.1	2.4775	6	432	17.8	15.37
120	0.14476	0.0 10.01	0	0.5470 5.7	31 65.2	2.7592	6	432	17.8	13.61
121	0.06899	0.0 25.65	0	0.5810 5.8	70 69.7	2.2577	2	188	19.1	14.37
122	0.07165	0.0 25.65	0	0.5810 6.0	04 84.1	2.1974	2	188	19.1	14.27
123	0.09299	0.0 25.65	0	0.5810 5.9	92.9	2.0869	2	188	19.1	17.93
124	0.15038	0.0 25.65	0	0.5810 5.8	56 97.0	1.9444	2	188	19.1	25.41
125	0.09849	0.0 25.65	0	0.5810 5.8	79 95.8	2.0063	2	188	19.1	17.58
126	0.16902	0.0 25.65	0	0.5810 5.9	36 88.4	1.9929	2	188	19.1	14.81
127	0.38735	0.0 25.65	0	0.5810 5.6	13 95.6	1.7572	2	188	19.1	27.26
128	0.25915	0.0 21.89	0	0.6240 5.6	93 96.0	1.7883	4	437	21.2	17.19
129	0.32543	0.0 21.89	0	0.6240 6.4	31 98.8	1.8125	4	437	21.2	15.39
130	0.88125	0.0 21.89	0	0.6240 5.6	37 94.7	1.9799	4	437	21.2	18.34
131	0.34006	0.0 21.89	0	0.6240 6.4	58 98.9	2.1185	4	437	21.2	12.60
132	1.19294	0.0 21.89	0	0.6240 6.3	26 97.7	2.2710	4	437	21.2	12.26
133	0.59005	0.0 21.89	0	0.6240 6.3	72 97.9	2.3274	4	437	21.2	11.12
134	0.32982	0.0 21.89	0	0.6240 5.8	22 95.4	2.4699	4	437	21.2	15.03
135	0.97617	0.0 21.89	0	0.6240 5.7	57 98.4	2.3460	4	437	21.2	17.31
136	0.55778	0.0 21.89	0	0.6240 6.3	35 98.2	2.1107	4	437	21.2	16.96
137	0.32264	0.0 21.89	0	0.6240 5.9	12 93.5	1.9669	4	437	21.2	16.90
138	0.35233	0.0 21.89	0	0.6240 6.4	54 98.4	1.8498	4	437	21.2	14.59
139	0.24980	0.0 21.89	0	0.6240 5.8	57 98.2	1.6686	4	437	21.2	21.32
140	0.54452	0.0 21.89	0	0.6240 6.1	51 97.9	1.6687	4	437	21.2	18.46
141	0.29090	0.0 21.89	0	0.6240 6.1	74 93.6	1.6119	4	437	21.2	24.16
142	1.62864	0.0 21.89	0	0.6240 5.0	19 100.0	1.4394	4	437	21.2	34.41
143	3.32105	0.0 19.58	1	0.8710 5.4	03 100.0	1.3216	5	403	14.7	26.82
144	4.09740	0.0 19.58	0	0.8710 5.4	88 100.0	1.4118	5	403	14.7	26.42
145	2.77974	0.0 19.58	0	0.8710 4.9	97.8	1.3459	5	403	14.7	29.29
146	2.37934	0.0 19.58	0	0.8710 6.13	30 100.0	1.4191	5	403	14.7	27.80
147	2.15505	0.0 19.58	0	0.8710 5.6	28 100.0	1.5166	5	403	14.7	16.65
148	2.36862	0.0 19.58	0	0.8710 4.9	26 95.7	1.4608	5	403	14.7	29.53
149	2.33099	0.0 19.58	0	0.8710 5.1	36 93.8	1.5296	5	403	14.7	28.32
150	2.73397	0.0 19.58	0	0.8710 5.5	94.9	1.5257	5	403	14.7	21.45
151	1.65660	0.0 19.58	0	0.8710 6.1	22 97.3	1.6180	5	403	14.7	14.10
152	1.49632	0.0 19.58	0	0.8710 5.4	04 100.0	1.5916	5	403	14.7	13.28
153	1.12658	0.0 19.58	1	0.8710 5.0	12 88.0	1.6102	5	403	14.7	12.12
154	2.14918	0.0 19.58	0	0.8710 5.7	98.5	1.6232		403	14.7	15.79
155	1.41385	0.0 19.58	1	0.8710 6.1		1.7494		403	14.7	15.12
156	3.53501	0.0 19.58	1	0.8710 6.1		1.7455	5	403	14.7	15.02
157	2.44668	0.0 19.58	0	0.8710 5.2		1.7364		403		16.14
158	1.22358	0.0 19.58		0.6050 6.9		1.8773		403		4.59
159	1.34284	0.0 19.58		0.6050 6.0		1.7573		403	14.7	

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		68.7	2.7019	5	296	16.6	9.64
176	0.06664	0.0	4.05	0	0.5100		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		16.6	6.29
179	0.06642	0.0	4.05	0	0.5100		74.4	2.9153	5	296	16.6	6.92
180	0.05780	0.0	2.46	0	0.4880		58.4	2.8290		193	17.8	5.04
181	0.06588	0.0	2.46	0	0.4880	7.765	83.3	2.7410		193	17.8	7.56
182	0.06888	0.0	2.46	0	0.4880		62.2	2.5979		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		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		11.38
242	0.10612	30.0	4.93	0	0.4280	6.095	65.1	6.3361	6	300		12.40
243	0.10290	30.0	4.93	0	0.4280	6.358	52.9	7.0355		300		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		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 0.405	0 6.315	45.6	7.3172	6 293	16.6	7.60
290	0.04297	52.5	5.32	0 0.405	0 6.565	22.9	7.3172	6 293	16.6	9.51
291	0.03502	80.0	4.95	0 0.411	0 6.861	27.9	5.1167	4 245	19.2	3.33
292	0.07886	80.0	4.95	0 0.411	0 7.148	27.7	5.1167	4 245	19.2	3.56
293	0.03615	80.0	4.95	0 0.411	0 6.630	23.4	5.1167	4 245	19.2	4.70
294	0.08265	0.0	13.92	0 0.437	0 6.127	18.4	5.5027	4 289	16.0	8.58
295	0.08199	0.0	13.92	0 0.437	0 6.009	42.3	5.5027	4 289	16.0	10.40
296	0.12932	0.0	13.92	0 0.437	0 6.678	31.1	5.9604	4 289	16.0	6.27
297	0.05372	0.0	13.92	0 0.437	0 6.549	51.0	5.9604	4 289	16.0	7.39
298	0.14103	0.0	13.92	0 0.437	0 5.790	58.0	6.3200	4 289	16.0	15.84
299	0.06466	70.0	2.24	0 0.400	0 6.345	20.1	7.8278	5 358	14.8	4.97
300	0.05561	70.0	2.24	0 0.400	0 7.041	10.0	7.8278	5 358	14.8	4.74
301	0.04417	70.0	2.24	0 0.400	0 6.871	47.4	7.8278	5 358	14.8	6.07
302	0.03537	34.0	6.09	0 0.433	0 6.590	40.4	5.4917	7 329	16.1	9.50
303	0.09266	34.0	6.09	0 0.433	0 6.495	18.4	5.4917	7 329	16.1	8.67
304	0.10000	34.0	6.09	0 0.433	0 6.982	17.7	5.4917	7 329	16.1	4.86
305	0.05515	33.0	2.18	0 0.472	0 7.236	41.1	4.0220	7 222	18.4	6.93
306	0.05479	33.0	2.18	0 0.472	0 6.616	58.1	3.3700	7 222	18.4	8.93
307	0.07503	33.0	2.18	0 0.472	0 7.420	71.9	3.0992	7 222	18.4	6.47
308	0.04932	33.0	2.18	0 0.472	0 6.849	70.3	3.1827	7 222	18.4	7.53
309	0.49298	0.0	9.90	0 0.544	0 6.635	82.5	3.3175	4 304	18.4	4.54
310	0.34940	0.0	9.90	0 0.544	0 5.972	76.7	3.1025	4 304	18.4	9.97
311	2.63548	0.0	9.90	0 0.544	0 4.973	37.8	2.5194	4 304	18.4	12.64
312	0.79041	0.0	9.90	0 0.544	0 6.122	52.8	2.6403	4 304	18.4	5.98
313	0.26169	0.0	9.90	0 0.544	0 6.023	90.4	2.8340	4 304	18.4	11.72
314	0.26938	0.0	9.90	0 0.544	0 6.266	82.8	3.2628	4 304	18.4	7.90
315	0.36920	0.0	9.90	0 0.544	0 6.567	87.3	3.6023	4 304	18.4	9.28
316	0.25356	0.0	9.90	0 0.544	0 5.705	77.7	3.9450	4 304	18.4	11.50
317	0.31827	0.0	9.90	0 0.544	0 5.914	83.2	3.9986	4 304	18.4	18.33
318	0.24522	0.0	9.90	0 0.544	0 5.782	71.7	4.0317	4 304	18.4	15.94
319	0.40202	0.0	9.90	0 0.544	0 6.382	67.2	3.5325	4 304	18.4	10.36
320	0.47547	0.0	9.90	0 0.544	0 6.113	58.8	4.0019	4 304	18.4	12.73
321	0.16760	0.0	7.38	0 0.493	0 6.426	52.3	4.5404	5 287	19.6	7.20
322	0.18159	0.0	7.38	0 0.493	0 6.376	54.3	4.5404	5 287	19.6	6.87
323	0.35114	0.0	7.38	0 0.493	0 6.041	49.9	4.7211	5 287	19.6	7.70
324	0.28392	0.0	7.38	0 0.493	0 5.708	74.3	4.7211	5 287	19.6	11.74
325	0.34109	0.0	7.38	0 0.493	0 6.415	40.1	4.7211	5 287	19.6	6.12
326	0.19186	0.0	7.38	0 0.493	0 6.431	14.7	5.4159	5 287	19.6	5.08
327	0.30347	0.0	7.38	0 0.493	0 6.312	28.9	5.4159	5 287	19.6	6.15
328	0.24103	0.0	7.38	0 0.493	0 6.083	43.7	5.4159	5 287	19.6	12.79
329	0.06617	0.0	3.24	0 0.460	0 5.868	25.8	5.2146	4 430	16.9	9.97
330	0.06724	0.0	3.24	0 0.460	0 6.333	17.2	5.2146	4 430	16.9	7.34
331	0.04544	0.0	3.24	0 0.460	0 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 18.1	0 0.6680	4.138 100	.0 1.1370	24 666	20.2 37.97
376	19.60910	0.0 18.1	0 0.6710	7.313 97	.9 1.3163	24 666	20.2 13.44
377	15.28800	0.0 18.1	0 0.6710	6.649 93	.3 1.3449	24 666	20.2 23.24
378	9.82349	0.0 18.1	0 0.6710	6.794 98	.8 1.3580	24 666	20.2 21.24
379	23.64820	0.0 18.1	0 0.6710	6.380 96	.2 1.3861	24 666	20.2 23.69
380	17.86670	0.0 18.1	0 0.6710	6.223 100	.0 1.3861	24 666	20.2 21.78
381	88.97620	0.0 18.1	0 0.6710	6.968 91	.9 1.4165	24 666	20.2 17.21
382	15.87440	0.0 18.1	0 0.6710	6.545 99	.1 1.5192	24 666	20.2 21.08
383	9.18702	0.0 18.1	0 0.7000	5.536 100	.0 1.5804	24 666	20.2 23.60
384	7.99248	0.0 18.1	0 0.7000	5.520 100	.0 1.5331	24 666	20.2 24.56
385	20.08490	0.0 18.1	0 0.7000	4.368 91	.2 1.4395	24 666	20.2 30.63
386	16.81180	0.0 18.1	0 0.7000	5.277 98	.1 1.4261	24 666	20.2 30.81
387	24.39380	0.0 18.1	0 0.7000	4.652 100	.0 1.4672	24 666	20.2 28.28
388	22.59710	0.0 18.1	0 0.7000	5.000 89	.5 1.5184	24 666	20.2 31.99
389	14.33370	0.0 18.1	0 0.7000	4.880 100	.0 1.5895	24 666	20.2 30.62
390	8.15174	0.0 18.1	0 0.7000	5.390 98	.9 1.7281	24 666	20.2 20.85
391	6.96215	0.0 18.1	0 0.7000	5.713 97	.0 1.9265	24 666	20.2 17.11
392	5.29305	0.0 18.1	0 0.7000	6.051 82	.5 2.1678	24 666	20.2 18.76
393	11.57790	0.0 18.1	0 0.7000	5.036 97	.0 1.7700	24 666	20.2 25.68
394	8.64476	0.0 18.1	0 0.6930	6.193 92	.6 1.7912	24 666	20.2 15.17
395	13.35980	0.0 18.1	0 0.6930	5.887 94	.7 1.7821	24 666	20.2 16.35
396	8.71675	0.0 18.1	0 0.6930	6.471 98	.8 1.7257	24 666	20.2 17.12
397	5.87205	0.0 18.1	0 0.6930	6.405 96	.0 1.6768	24 666	20.2 19.37
398	7.67202	0.0 18.1	0 0.6930	5.747 98	.9 1.6334	24 666	20.2 19.92
399	38.35180	0.0 18.1	0 0.6930	5.453 100	.0 1.4896	24 666	20.2 30.59
400	9.91655	0.0 18.1	0 0.6930	5.852 77	.8 1.5004	24 666	20.2 29.97
401	25.04610	0.0 18.1	0 0.6930	5.987 100	.0 1.5888	24 666	20.2 26.77
402	14.23620	0.0 18.1	0 0.6930	6.343 100	.0 1.5741	24 666	20.2 20.32
403	9.59571	0.0 18.1	0 0.6930	6.404 100	.0 1.6390	24 666	20.2 20.31
404	24.80170	0.0 18.1	0 0.6930	5.349 96	.0 1.7028	24 666	20.2 19.77
405	41.52920	0.0 18.1	0 0.6930	5.531 85	.4 1.6074	24 666	20.2 27.38
406	67.92080	0.0 18.1	0 0.6930	5.683 100	.0 1.4254	24 666	20.2 22.98
407	20.71620	0.0 18.1	0 0.6590	4.138 100	.0 1.1781	24 666	20.2 23.34
408	11.95110	0.0 18.1	0 0.6590	5.608 100	.0 1.2852	24 666	20.2 12.13
409	7.40389	0.0 18.1	0 0.5970	5.617 97	.9 1.4547	24 666	20.2 26.40
410	14.43830	0.0 18.1	0 0.5970	6.852 100	.0 1.4655	24 666	20.2 19.78
411	51.13580	0.0 18.1	0 0.5970	5.757 100	.0 1.4130	24 666	20.2 10.11
412	14.05070	0.0 18.1	0 0.5970	6.657 100	.0 1.5275	24 666	20.2 21.22
413	18.81100	0.0 18.1	0 0.5970	4.628 100	.0 1.5539	24 666	20.2 34.37
414	28.65580	0.0 18.1	0 0.5970	5.155 100	.0 1.5894	24 666	20.2 20.08
415	45.74610	0.0 18.1	0 0.6930	4.519 100	.0 1.6582	24 666	20.2 36.98
416	18.08460	0.0 18.1	0 0.6790	6.434 100	.0 1.8347	24 666	20.2 29.05
417	10.83420	0.0 18.1	0 0.6790	6.782 90	.8 1.8195	24 666	20.2 25.79

418	25.94060	0.0 18.	.0 0	0.6790	5.304	89.1	1.6475	24	666	20.2	26.64
419	73.53410	0.0 18.	.0 0	0.6790	5.957	100.0	1.8026	24	666	20.2	20.62
420	11.81230	0.0 18.	.0 0	0.7180	6.824	76.5	1.7940	24	666	20.2	22.74
421	11.08740	0.0 18.	.0 0	0.7180	6.411	100.0	1.8589	24	666	20.2	15.02
422	7.02259	0.0 18.	.0 0	0.7180	6.006	95.3	1.8746	24	666	20.2	15.70
423	12.04820	0.0 18.	.0 0	0.6140	5.648	87.6	1.9512	24	666	20.2	14.10
424	7.05042	0.0 18.	.0 0	0.6140	6.103	85.1	2.0218	24	666	20.2	23.29
425	8.79212	0.0 18.	.0 0	0.5840	5.565	70.6	2.0635	24	666	20.2	17.16
426	15.86030	0.0 18.	.0 0	0.6790	5.896	95.4	1.9096	24	666	20.2	24.39
427	12.24720	0.0 18.	.0 0	0.5840	5.837	59.7	1.9976	24	666	20.2	15.69
428	37.66190	0.0 18.	.0 0	0.6790	6.202	78.7	1.8629	24	666	20.2	14.52
429	7.36711	0.0 18.	.0 0	0.6790	6.193	78.1	1.9356	24	666	20.2	21.52
430	9.33889	0.0 18.	.0 0	0.6790	6.380	95.6	1.9682	24	666	20.2	24.08
431	8.49213	0.0 18.	.0 0	0.5840	6.348	86.1	2.0527	24	666	20.2	17.64
432	10.06230	0.0 18.	.0 0			94.3	2.0882	24	666		19.69
433	6.44405	0.0 18.	.0 0	0.5840	6.425	74.8	2.2004	24	666	20.2	12.03
434	5.58107	0.0 18.				87.9	2.3158		666		16.22
435	13.91340	0.0 18.	.0 0	0.7130	6.208	95.0	2.2222	24	666	20.2	15.17
436	11.16040	0.0 18.				94.6	2.1247	24	666		23.27
437		0.0 18.				93.3	2.0026	24	666		18.05
	15.17720	0.0 18.					1.9142		666		26.45
439	13.67810	0.0 18.	.0 0	0.7400	5.935	87.9	1.8206	24	666		34.02
440	9.39063	0.0 18.	.0 0	0.7400	5.627	93.9	1.8172	24	666		22.88
441	22.05110	0.0 18.		0.7400	5.818	92.4	1.8662	24	666	20.2	22.11
442	9.72418	0.0 18.	.0 0	0.7400	6.406	97.2	2.0651	24	666	20.2	19.52
443	5.66637	0.0 18.3	.0 0	0.7400	6.219	100.0	2.0048	24	666	20.2	16.59
444	9.96654	0.0 18.3	.0 0	0.7400	6.485	100.0	1.9784	24	666	20.2	18.85
445	12.80230	0.0 18.3	.0 0	0.7400	5.854	96.6	1.8956	24	666	20.2	23.79
446	10.67180	0.0 18.3	.0 0			94.8	1.9879	24	666	20.2	23.98
447	6.28807	0.0 18.3	.0 0			96.4	2.0720	24	666	20.2	17.79
448	9.92485	0.0 18.3	.0 0	0.7400	6.251	96.6	2.1980	24	666	20.2	16.44
449	9.32909	0.0 18.3	.0 0	0.7130	6.185	98.7	2.2616	24	666	20.2	18.13
450	7.52601	0.0 18.	.0 0	0.7130	6.417	98.3	2.1850	24	666	20.2	19.31
451	6.71772	0.0 18.	.0 0	0.7130	6.749	92.6	2.3236	24	666	20.2	17.44
452	5.44114	0.0 18.	.0 0	0.7130	6.655	98.2	2.3552	24	666	20.2	17.73
453	5.09017	0.0 18.	.0 0	0.7130	6.297	91.8	2.3682	24	666	20.2	17.27
454	8.24809	0.0 18.	.0 0	0.7130	7.393	99.3	2.4527	24	666	20.2	16.74
455	9.51363	0.0 18.	.0 0	0.7130	6.728	94.1	2.4961	24	666	20.2	18.71
456	4.75237	0.0 18.	.0 0	0.7130	6.525	86.5	2.4358	24	666	20.2	18.13
457	4.66883	0.0 18.	.0 0	0.7130	5.976	87.9	2.5806	24	666	20.2	19.01
458	8.20058	0.0 18.	.0 0	0.7130	5.936	80.3	2.7792	24	666	20.2	16.94
459	7.75223	0.0 18.	.0 0	0.7130	6.301	83.7	2.7831	24	666	20.2	16.23
460	6.80117	0.0 18.	.0 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
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			0.5850		70.6	2.8927		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	
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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2	0.02731	0.0	7.07	0 0.4690	6.421	78.9	4.9671	2 242	17.8 9.14	Ŀ
3	0.02729	0.0	7.07	0 0.4690	7.185	61.1	4.9671	2 242	17.8 4.03	3
4	0.03237	0.0	2.18	0 0.4580	6.998	45.8	6.0622	3 222	18.7 2.94	Ŀ
5	0.06905	0.0	2.18	0 0.4580	7.147	54.2	6.0622	3 222	18.7 5.33	3
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	3
8	0.14455	12.5	7.87	0 0.5240	6.172	96.1	5.9505	5 311	15.2 19.15	5
9	0.21124	12.5	7.87	0 0.5240	5.631	100.0	6.0821	5 311	15.2 29.93	3
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	7
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	7
17	1.05393	0.0	8.14	0 0.5380	5.935	29.3	4.4986	4 307	21.0 6.58	3
18	0.78420	0.0	8.14	0 0.5380	5.990	81.7	4.2579	4 307	21.0 14.67	7
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	3
21	1.25179	0.0	8.14	0 0.5380	5.570	98.1	3.7979	4 307	21.0 21.02	2
22	0.85204	0.0	8.14	0 0.5380	5.965	89.2	4.0123	4 307	21.0 13.83	3
23	1.23247	0.0	8.14	0 0.5380	6.142	91.7	3.9769	4 307	21.0 18.72	2
24	0.98843	0.0	8.14	0 0.5380	5.813	100.0	4.0952	4 307	21.0 19.88	3
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	3
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	3
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	Ŀ
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	5
35	1.61282	0.0	8.14	0 0.5380	6.096	96.9	3.7598	4 307	21.0 20.34	Ŀ
36	0.06417	0.0	5.96	0 0.4990	5.933	68.2	3.3603	5 279	19.2 9.68	3
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	7
39	0.17505	0.0	5.96	0 0.4990	5.966	30.2	3.8473	5 279	19.2 10.13	3
40	0.02763	75.0	2.95	0 0.4280	6.595	21.8	5.4011	3 252	18.3 4.32	2
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	Ŀ
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	Ŀ

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 9	98.9 2.1185	4 437	21.2 12.60
132	1.19294	0.0 21.89	0 0.6240	6.326 9	7.7 2.2710	4 437	21.2 12.26
133	0.59005	0.0 21.89	0 0.6240	6.372 9	7.9 2.3274	4 437	21.2 11.12
134	0.32982	0.0 21.89	0 0.6240	5.822 9	5.4 2.4699	4 437	21.2 15.03
135	0.97617	0.0 21.89	0 0.6240	5.757 9	98.4 2.3460	4 437	21.2 17.31
136	0.55778	0.0 21.89	0 0.6240	6.335 9	8.2 2.1107	4 437	21.2 16.96
137	0.32264	0.0 21.89	0 0.6240	5.942 9	3.5 1.9669	4 437	21.2 16.90
138	0.35233	0.0 21.89	0 0.6240	0 6.454 9	98.4 1.8498	4 437	21.2 14.59
139	0.24980	0.0 21.89	0 0.6240	5.857 9	98.2 1.6686	4 437	21.2 21.32
140	0.54452	0.0 21.89	0 0.6240	6.151 9	97.9 1.6687	4 437	21.2 18.46
141	0.29090	0.0 21.89	0 0.6240	6.174 9	3.6 1.6119	4 437	21.2 24.16
142	1.62864	0.0 21.89		5.019 10		4 437	21.2 34.41
143	3.32105	0.0 19.58		5.403 10		5 403	14.7 26.82
144	4.09740	0.0 19.58	0 0.8710	5.468 10	00.0 1.4118	5 403	14.7 26.42
145	2.77974	0.0 19.58	0 0.8710	4.903 9	7.8 1.3459	5 403	14.7 29.29
146	2.37934	0.0 19.58	0 0.8710	6.130 10	00.0 1.4191	5 403	14.7 27.80
147	2.15505	0.0 19.58		5.628 10		5 403	14.7 16.65
148	2.36862	0.0 19.58	0 0.8710	4.926 9	05.7 1.4608	5 403	14.7 29.53
149	2.33099	0.0 19.58			3.8 1.5296	5 403	14.7 28.32
150	2.73397	0.0 19.58			94.9 1.5257	5 403	14.7 21.45
151	1.65660	0.0 19.58			7.3 1.6180	5 403	14.7 14.10
152	1.49632	0.0 19.58		5.404 10		5 403	14.7 13.28
153	1.12658	0.0 19.58	1 0.8710		88.0 1.6102	5 403	14.7 12.12
154	2.14918	0.0 19.58	0 0.8710	5.709 9	8.5 1.6232	5 403	14.7 15.79
155	1.41385	0.0 19.58	1 0.8710	6.129 9	06.0 1.7494	5 403	14.7 15.12
156	3.53501	0.0 19.58	1 0.8710	6.152 8	32.6 1.7455	5 403	14.7 15.02
157	2.44668	0.0 19.58			94.0 1.7364	5 403	14.7 16.14
158	1.22358	0.0 19.58			07.4 1.8773	5 403	14.7 4.59
159	1.34284	0.0 19.58	0 0.6050	6.066 10	0.0 1.7573	5 403	14.7 6.43
160	1.42502	0.0 19.58		6.510 10	0.0 1.7659	5 403	14.7 7.39
161	1.27346	0.0 19.58	1 0.6050		2.6 1.7984	5 403	14.7 5.50
162	1.46336	0.0 19.58	0 0.6050	7.489 9	0.8 1.9709	5 403	14.7 1.73
163	1.83377	0.0 19.58	1 0.6050	7.802 9	98.2 2.0407	5 403	14.7 1.92
164	1.51902	0.0 19.58	1 0.6050	8.375 9	3.9 2.1620	5 403	14.7 3.32
165	2.24236	0.0 19.58	0 0.6050	5.854 9	91.8 2.4220	5 403	14.7 11.64
166	2.92400	0.0 19.58	0 0.6050	6.101 9	93.0 2.2834	5 403	14.7 9.81
167	2.01019	0.0 19.58	0 0.6050	7.929 9	96.2 2.0459	5 403	14.7 3.70
168	1.80028	0.0 19.58	0 0.6050	5.877 7	9.2 2.4259	5 403	14.7 12.14
169	2.30040	0.0 19.58	0 0.6050	6.319 9	96.1 2.1000	5 403	14.7 11.10
170	2.44953	0.0 19.58	0 0.6050	0 6.402 9	95.2 2.2625	5 403	14.7 11.32
171	1.20742	0.0 19.58	0 0.6050	5.875 9	94.6 2.4259	5 403	14.7 14.43
172	2.31390	0.0 19.58	0 0.6050	5.880 9	97.3 2.3887	5 403	14.7 12.03
173	0.13914	0.0 4.05	0 0.5100	5.572 8	88.5 2.5961	5 296	16.6 14.69

174	0.09178	0.0	4.05	0 0.51	00 6.416	84.1	2.6463	5	296	16.6	9.04
175	0.08447	0.0	4.05	0 0.51	00 5.859	68.7	2.7019	5	296	16.6	9.64
176	0.06664	0.0	4.05	0 0.51	00 6.546	33.1	3.1323	5	296	16.6	5.33
177	0.07022	0.0	4.05	0 0.51	00 6.020	47.2	3.5549	5	296	16.6	10.11
178	0.05425	0.0	4.05	0 0.51	00 6.315	73.4	3.3175	5	296	16.6	6.29
179	0.06642	0.0	4.05	0 0.51	00 6.860	74.4	2.9153	5	296	16.6	6.92
180	0.05780	0.0	2.46	0 0.48	80 6.980	58.4	2.8290	3	193	17.8	5.04
181	0.06588	0.0	2.46	0 0.48	80 7.765	83.3	2.7410	3	193	17.8	7.56
182	0.06888	0.0	2.46	0 0.48	80 6.144	62.2	2.5979	3	193	17.8	9.45
183	0.09103	0.0	2.46	0 0.48	80 7.155	92.2	2.7006	3	193	17.8	4.82
184	0.10008	0.0	2.46	0 0.48	80 6.563	95.6	2.8470	3	193	17.8	5.68
185	0.08308	0.0	2.46	0 0.48	80 5.604	89.8	2.9879	3	193	17.8	13.98
186	0.06047	0.0	2.46	0 0.48	80 6.153	68.8	3.2797	3	193	17.8	13.15
187	0.05602	0.0	2.46	0 0.48	80 7.831	53.6	3.1992	3	193	17.8	4.45
188	0.07875	45.0	3.44	0 0.43	70 6.782	41.1	3.7886	5	398	15.2	6.68
189	0.12579	45.0	3.44	0 0.43	70 6.556	29.1	4.5667	5	398	15.2	4.56
190	0.08370	45.0	3.44	0 0.43	70 7.185	38.9	4.5667	5	398	15.2	5.39
191	0.09068	45.0	3.44	0 0.43	70 6.951	21.5	6.4798	5	398	15.2	5.10
192	0.06911	45.0	3.44	0 0.43	70 6.739	30.8	6.4798	5	398	15.2	4.69
193	0.08664	45.0	3.44	0 0.43	70 7.178	26.3	6.4798	5	398	15.2	2.87
194	0.02187	60.0	2.93	0 0.40	10 6.800	9.9	6.2196	1	265	15.6	5.03
195	0.01439	60.0	2.93	0 0.40	10 6.604	18.8	6.2196	1	265	15.6	4.38
196	0.01381	80.0	0.46	0 0.42	20 7.875	32.0	5.6484	4	255	14.4	2.97
197	0.04011	80.0	1.52	0 0.40	40 7.287	34.1	7.3090	2	329	12.6	4.08
198	0.04666	80.0	1.52	0 0.40	40 7.107	36.6	7.3090	2	329	12.6	8.61
199	0.03768	80.0	1.52	0 0.40	40 7.274	38.3	7.3090	2	329	12.6	6.62
200	0.03150	95.0	1.47	0 0.40	30 6.975	15.3	7.6534	3	402	17.0	4.56
201	0.01778	95.0	1.47	0 0.40	30 7.135	13.9	7.6534	3	402	17.0	4.45
202	0.03445	82.5	2.03	0 0.41	50 6.162	38.4	6.2700	2	348	14.7	7.43
203	0.02177	82.5	2.03	0 0.41	50 7.610	15.7	6.2700	2	348	14.7	3.11
204	0.03510	95.0	2.68	0 0.41	61 7.853	33.2	5.1180	4	224	14.7	3.81
205	0.02009	95.0	2.68	0 0.41	61 8.034	31.9	5.1180	4	224	14.7	2.88
206	0.13642	0.0	10.59	0 0.48	90 5.891	22.3	3.9454	4	277	18.6	10.87
207	0.22969	0.0	10.59	0 0.48	90 6.326	52.5	4.3549	4	277	18.6	10.97
208	0.25199	0.0	10.59	0 0.48	90 5.783	72.7	4.3549	4	277	18.6	18.06
209	0.13587	0.0	10.59	1 0.48	90 6.064	59.1	4.2392	4	277	18.6	14.66
210	0.43571	0.0	10.59	1 0.48	90 5.344	100.0	3.8750	4	277	18.6	23.09
211	0.17446	0.0	10.59	1 0.48	90 5.960	92.1	3.8771	4	277	18.6	17.27
212	0.37578	0.0	10.59	1 0.48	90 5.404	88.6	3.6650	4	277	18.6	23.98
213	0.21719	0.0	10.59	1 0.48	90 5.807	53.8	3.6526	4	277	18.6	16.03
214	0.14052	0.0	10.59	0 0.48	90 6.375	32.3	3.9454	4	277	18.6	9.38
215	0.28955	0.0	10.59	0 0.48	90 5.412	9.8	3.5875	4	277	18.6	29.55
216	0.19802	0.0	10.59	0 0.48	90 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 0.5	840 5.427	95.4	2.4298	24	666	20.2	18.14
476	6.39312	0.0 18.10	0 0.5	840 6.162	97.4	2.2060	24	666	20.2	24.10
477	4.87141	0.0 18.10	0 0.6	140 6.484	93.6	2.3053	24	666	20.2	18.68
478	15.02340	0.0 18.10	0 0.6	140 5.304	97.3	2.1007	24	666	20.2	24.91
479	10.23300	0.0 18.10	0 0.6	140 6.185	96.7	2.1705	24	666	20.2	18.03
480	14.33370	0.0 18.10	0 0.6	140 6.229	88.0	1.9512	24	666	20.2	13.11
481	5.82401	0.0 18.10	0 0.5	320 6.242	64.7	3.4242	24	666	20.2	10.74
482	5.70818	0.0 18.10	0 0.5	320 6.750	74.9	3.3317	24	666	20.2	7.74
483	5.73116	0.0 18.10	0 0.5	320 7.061	77.0	3.4106	24	666	20.2	7.01
484	2.81838	0.0 18.10	0 0.5	320 5.762	40.3	4.0983	24	666	20.2	10.42
485	2.37857	0.0 18.10	0 0.5	830 5.871	41.9	3.7240	24	666	20.2	13.34
486	3.67367	0.0 18.10	0 0.5	830 6.312	51.9	3.9917	24	666	20.2	10.58
487	5.69175	0.0 18.10	0 0.5	830 6.114	79.8	3.5459	24	666	20.2	14.98
488	4.83567	0.0 18.10	0 0.5	830 5.905	53.2	3.1523	24	666	20.2	11.45
489	0.15086	0.0 27.74	0 0.6	090 5.454	92.7	1.8209	4	711	20.1	18.06
490	0.18337	0.0 27.74	0 0.6	090 5.414	98.3	1.7554	4	711	20.1	23.97
491	0.20746	0.0 27.74	0 0.6	090 5.093	98.0	1.8226	4	711	20.1	29.68
492	0.10574	0.0 27.74	0 0.6	090 5.983	98.8	1.8681	4	711	20.1	18.07
493	0.11132	0.0 27.74	0 0.6	090 5.983	83.5	2.1099	4	711	20.1	13.35
494	0.17331	0.0 9.69	0 0.5	850 5.707	54.0	2.3817	6	391	19.2	12.01
495	0.27957	0.0 9.69		850 5.926	42.6	2.3817		391	19.2	13.59
496	0.17899	0.0 9.69		850 5.670	28.8	2.7986		391		17.60
497	0.28960	0.0 9.69		850 5.390	72.9	2.7986		391		21.14
498	0.26838	0.0 9.69		850 5.794	70.6	2.8927		391		14.10
499	0.23912	0.0 9.69		850 6.019	65.3	2.4091		391		12.92
500	0.17783	0.0 9.69		850 5.569	73.5	2.3999		391		15.10
501	0.22438	0.0 9.69		850 6.027	79.7	2.4982		391		14.33
502	0.06263	0.0 11.93		730 6.593	69.1	2.4786		273	21.0	
503	0.04527	0.0 11.93		730 6.120	76.7	2.2875		273	21.0	
504	0.06076	0.0 11.93		730 6.976	91.0	2.1675		273	21.0	
505	0.10959	0.0 11.93		730 6.794	89.3	2.3889		273	21.0	
506	0.04741	0.0 11.93	0 0.5	730 6.030	80.8	2.5050	1	273	21.0	7.88

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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	2 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	3 17.9 5.81
44	0.15936	0.0	6.91	0 0.4480	6.211	6.5	5.7209	3 233	3 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	3 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 0.453	80 6.145	29.2	7.8148	8 2	284	19.7	6.86
60	0.10328	25.0	5.13	0 0.453	30 5.927	47.2	6.9320	8 2	284	19.7	9.22
61	0.14932	25.0	5.13	0 0.453	30 5.741	66.2	7.2254	8 2	284	19.7	13.15
62	0.17171	25.0	5.13	0 0.453	30 5.966	93.4	6.8185	8 2	284	19.7	14.44
63	0.11027	25.0	5.13	0 0.453	30 6.456	67.8	7.2255	8 2	284	19.7	6.73
64	0.12650	25.0	5.13	0 0.453	30 6.762	43.4	7.9809	8 2	284	19.7	9.50
65	0.01951	17.5	1.38	0 0.416	31 7.104	59.5	9.2229	3 2	216	18.6	8.05
66	0.03584	80.0	3.37	0 0.398	30 6.290	17.8	6.6115	4 3	337	16.1	4.67
67	0.04379	80.0	3.37	0 0.398	30 5.787	31.1	6.6115	4 3	337	16.1	10.24
68	0.05789	12.5	6.07	0 0.409	0 5.878	21.4	6.4980	4 3	345	18.9	8.10
69	0.13554	12.5	6.07	0 0.409	0 5.594	36.8	6.4980	4 3	345	18.9	13.09
70	0.12816	12.5	6.07	0 0.409	0 5.885	33.0	6.4980	4 3	345	18.9	8.79
71	0.08826	0.0	10.81	0 0.413	30 6.417	6.6	5.2873	4 3	305	19.2	6.72
72	0.15876	0.0	10.81	0 0.413	30 5.961	17.5	5.2873	4 3	305	19.2	9.88
73	0.09164	0.0	10.81	0 0.413	80 6.065	7.8	5.2873	4 3	305	19.2	5.52
74	0.19539	0.0	10.81	0 0.413	30 6.245	6.2	5.2873	4 3	305	19.2	7.54
75	0.07896	0.0	12.83	0 0.437	0 6.273	6.0	4.2515	5 3	398	18.7	6.78
76	0.09512	0.0	12.83	0 0.437	0 6.286	45.0	4.5026	5 3	398	18.7	8.94
77	0.10153	0.0	12.83	0 0.437	0 6.279	74.5	4.0522	5 3	398	18.7	11.97
78	0.08707	0.0	12.83	0 0.437	0 6.140	45.8	4.0905	5 3	398	18.7	10.27
79	0.05646	0.0	12.83	0 0.437	0 6.232	53.7	5.0141	5 3	398	18.7	12.34
80	0.08387	0.0	12.83	0 0.437	0 5.874	36.6	4.5026	5 3	398	18.7	9.10
81	0.04113	25.0	4.86	0 0.426	6.727	33.5	5.4007	4 2	281	19.0	5.29
82	0.04462	25.0	4.86	0 0.426	6.619	70.4	5.4007	4 2	281	19.0	7.22
83	0.03659	25.0	4.86	0 0.426	6.302	32.2	5.4007	4 2	281	19.0	6.72
84	0.03551	25.0	4.86	0 0.426	6.167	46.7	5.4007	4 2	281	19.0	7.51
85	0.05059	0.0	4.49	0 0.449	0 6.389	48.0	4.7794	3 2	247	18.5	9.62
86	0.05735	0.0	4.49	0 0.449	0 6.630	56.1	4.4377	3 2	247	18.5	6.53
87	0.05188	0.0	4.49	0 0.449	0 6.015	45.1	4.4272	3 2	247	18.5	12.86
88	0.07151	0.0	4.49	0 0.449	0 6.121	56.8	3.7476	3 2	247	18.5	8.44
89	0.05660	0.0	3.41	0 0.489	7.007	86.3	3.4217	2 2	270	17.8	5.50
90	0.05302	0.0	3.41	0 0.489	0 7.079	63.1	3.4145	2 2	270	17.8	5.70
91	0.04684	0.0	3.41	0 0.489	0 6.417	66.1	3.0923	2 2	270	17.8	8.81
92	0.03932	0.0	3.41	0 0.489	0 6.405	73.9	3.0921	2 2	270	17.8	8.20
93	0.04203	28.0	15.04	0 0.464	0 6.442	53.6	3.6659	4 2	270	18.2	8.16
94	0.02875	28.0	15.04	0 0.464	10 6.211	28.9	3.6659	4 2	270	18.2	6.21
95	0.04294	28.0	15.04	0 0.464	10 6.249	77.3	3.6150	4 2	270	18.2	10.59
96	0.12204	0.0	2.89	0 0.445	6.625	57.8	3.4952	2 2	276	18.0	6.65
97	0.11504	0.0	2.89	0 0.445	60 6.163	69.6	3.4952	2 2	276	18.0	11.34
98	0.12083	0.0	2.89	0 0.445	8.069	76.0	3.4952	2 2	276	18.0	4.21
99	0.08187	0.0	2.89	0 0.445	7.820	36.9	3.4952	2 2	276	18.0	3.57
100	0.06860	0.0	2.89	0 0.445	7.416	62.5	3.4952	2 2	276	18.0	6.19
101	0.14866	0.0	8.56	0 0.520	0 6.727	79.9	2.7778	5 3	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		98.2	1.6686	4 437	21.2 21.32
140	0.54452	0.0 21.89	0 0.6240		97.9	1.6687	4 437	21.2 18.46
141	0.29090	0.0 21.89	0 0.6240		93.6	1.6119	4 437	21.2 24.16
142	1.62864	0.0 21.89	0 0.6240			1.4394	4 437	21.2 34.41
143	3.32105	0.0 19.58	1 0.8710			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		403	14.7	29.29
146	2.37934	0.0 19		0.8710			1.4191		403		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			0.5100	6.860	74.4	2.9153		296	16.6	6.92
180	0.05780			0.4880	6.980	58.4	2.8290		193	17.8	5.04
181	0.06588			0.4880		83.3	2.7410		193	17.8	7.56
182	0.06888		.46 0	0.4880		62.2	2.5979		193	17.8	9.45
183	0.09103			0.4880		92.2	2.7006		193	17.8	4.82
184	0.10008		.46 0			95.6	2.8470	3	193	17.8	5.68
185	0.08308			0.4880		89.8	2.9879		193		13.98
186	0.06047		.46 0	0.4880	6.153	68.8	3.2797		193	17.8	13.15
187	0.05602			0.4880		53.6	3.1992		193	17.8	

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 0.50	40 5.981	68.1	3.6715	8	307	17.4	11.65
232	0.46296	0.0	6.20	0 0.50	40 7.412	76.9	3.6715	8	307	17.4	5.25
233	0.57529	0.0	6.20	0 0.50	70 8.337	73.3	3.8384	8	307	17.4	2.47
234	0.33147	0.0	6.20	0 0.50	70 8.247	70.4	3.6519	8	307	17.4	3.95
235	0.44791	0.0	6.20	1 0.50	70 6.726	66.5	3.6519	8	307	17.4	8.05
236	0.33045	0.0	6.20	0 0.50	70 6.086	61.5	3.6519	8	307	17.4	10.88
237	0.52058	0.0	6.20	1 0.50	70 6.631	76.5	4.1480	8	307	17.4	9.54
238	0.51183	0.0	6.20	0 0.50	70 7.358	71.6	4.1480	8	307	17.4	4.73
239	0.08244	30.0	4.93	0 0.42	80 6.481	18.5	6.1899	6	300	16.6	6.36
240	0.09252	30.0	4.93	0 0.42	80 6.606	42.2	6.1899	6	300	16.6	7.37
241	0.11329	30.0	4.93	0 0.42	80 6.897	54.3	6.3361	6	300	16.6	11.38
242	0.10612	30.0	4.93	0 0.42	80 6.095	65.1	6.3361	6	300	16.6	12.40
243	0.10290	30.0	4.93	0 0.42	80 6.358	52.9	7.0355	6	300	16.6	11.22
244	0.12757	30.0	4.93	0 0.42	80 6.393	7.8	7.0355	6	300	16.6	5.19
245	0.20608	22.0	5.86	0 0.43	310 5.593	76.5	7.9549	7	330	19.1	12.50
246	0.19133	22.0	5.86	0 0.43	310 5.605	70.2	7.9549	7	330	19.1	18.46
247	0.33983	22.0	5.86	0 0.43	310 6.108	34.9	8.0555	7	330	19.1	9.16
248	0.19657	22.0	5.86	0 0.43	310 6.226	79.2	8.0555	7	330	19.1	10.15
249	0.16439	22.0	5.86	0 0.43	310 6.433	49.1	7.8265	7	330	19.1	9.52
250	0.19073	22.0	5.86	0 0.43	310 6.718	17.5	7.8265	7	330	19.1	6.56
251	0.14030	22.0	5.86	0 0.43	310 6.487	13.0	7.3967	7	330	19.1	5.90
252	0.21409	22.0	5.86	0 0.43	310 6.438	8.9	7.3967	7	330	19.1	3.59
253	0.08221	22.0	5.86	0 0.43	310 6.957	6.8	8.9067	7	330	19.1	3.53
254	0.36894	22.0	5.86	0 0.43	810 8.259	8.4	8.9067	7	330	19.1	3.54
255	0.04819	80.0	3.64	0 0.39	20 6.108	32.0	9.2203	1	315	16.4	6.57
256	0.03548	80.0	3.64	0 0.39	20 5.876	19.1	9.2203	1	315	16.4	9.25
257	0.01538	90.0	3.75	0 0.39	40 7.454	34.2	6.3361	3	244	15.9	3.11
258	0.61154	20.0	3.97	0 0.64	70 8.704	86.9	1.8010	5	264	13.0	5.12
259	0.66351	20.0	3.97	0 0.64	70 7.333	100.0	1.8946	5	264	13.0	7.79
260	0.65665	20.0	3.97	0 0.64	70 6.842	100.0	2.0107	5	264	13.0	6.90
261	0.54011	20.0	3.97	0 0.64	70 7.203	81.8	2.1121	5	264	13.0	9.59
262	0.53412	20.0	3.97	0 0.64	70 7.520	89.4	2.1398	5	264	13.0	7.26
263	0.52014	20.0	3.97	0 0.64	70 8.398	91.5	2.2885	5	264	13.0	5.91
264	0.82526	20.0	3.97	0 0.64	70 7.327	94.5	2.0788	5	264	13.0	11.25
265	0.55007	20.0	3.97	0 0.64	70 7.206	91.6	1.9301	5	264	13.0	8.10
266	0.76162	20.0	3.97	0 0.64	70 5.560	62.8	1.9865	5	264	13.0	10.45
267	0.78570	20.0	3.97	0 0.64	70 7.014	84.6	2.1329	5	264	13.0	14.79
268	0.57834	20.0	3.97	0 0.57	50 8.297	67.0	2.4216	5	264	13.0	7.44
269	0.54050	20.0	3.97	0 0.57	50 7.470	52.6	2.8720	5	264	13.0	3.16
270	0.09065	20.0	6.96	1 0.46	40 5.920	61.5	3.9175	3	223	18.6	13.65
271	0.29916	20.0	6.96	0 0.46	40 5.856	42.1	4.4290	3	223	18.6	13.00
272	0.16211	20.0	6.96	0 0.46	40 6.240	16.3	4.4290	3	223	18.6	6.59
273	0.11460	20.0	6.96	0 0.46	40 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 0.54	40 5.914	83.2	3.9986	4	304	18.4	18.33
318	0.24522	0.0	9.90	0 0.544	40 5.782	71.7	4.0317	4	304	18.4	15.94
319	0.40202	0.0	9.90	0 0.544	40 6.382	67.2	3.5325	4	304	18.4	10.36
320	0.47547	0.0	9.90	0 0.544	40 6.113	58.8	4.0019	4	304	18.4	12.73
321	0.16760	0.0	7.38	0 0.493	30 6.426	52.3	4.5404	5	287	19.6	7.20
322	0.18159	0.0	7.38	0 0.493	30 6.376	54.3	4.5404	5	287	19.6	6.87
323	0.35114	0.0	7.38	0 0.493	30 6.041	49.9	4.7211	5	287	19.6	7.70
324	0.28392	0.0	7.38	0 0.493	30 5.708	74.3	4.7211	5	287	19.6	11.74
325	0.34109	0.0	7.38	0 0.493	30 6.415	40.1	4.7211	5	287	19.6	6.12
326	0.19186	0.0	7.38	0 0.493	30 6.431	14.7	5.4159	5	287	19.6	5.08
327	0.30347	0.0	7.38	0 0.493	30 6.312	28.9	5.4159	5	287	19.6	6.15
328	0.24103	0.0	7.38	0 0.493	30 6.083	43.7	5.4159	5	287	19.6	12.79
329	0.06617	0.0	3.24	0 0.460	00 5.868	25.8	5.2146	4	430	16.9	9.97
330	0.06724	0.0	3.24	0 0.460	00 6.333	17.2	5.2146	4	430	16.9	7.34
331	0.04544	0.0	3.24	0 0.460	00 6.144	32.2	5.8736	4	430	16.9	9.09
332	0.05023	35.0	6.06	0 0.43	79 5.706	28.4	6.6407	1	304	16.9	12.43
333	0.03466	35.0	6.06	0 0.43	79 6.031	23.3	6.6407	1	304	16.9	7.83
334	0.05083	0.0	5.19	0 0.51	50 6.316	38.1	6.4584	5	224	20.2	5.68
335	0.03738	0.0	5.19	0 0.51	50 6.310	38.5	6.4584	5	224	20.2	6.75
336	0.03961	0.0	5.19	0 0.51	50 6.037	34.5	5.9853	5	224	20.2	8.01
337	0.03427	0.0	5.19	0 0.51	50 5.869	46.3	5.2311	5	224	20.2	9.80
338	0.03041	0.0	5.19	0 0.51	50 5.895	59.6	5.6150	5	224	20.2	10.56
339	0.03306	0.0	5.19	0 0.51	50 6.059	37.3	4.8122	5	224	20.2	8.51
340	0.05497	0.0	5.19	0 0.51	50 5.985	45.4	4.8122	5	224	20.2	9.74
341	0.06151	0.0	5.19	0 0.51	50 5.968	58.5	4.8122	5	224	20.2	9.29
342	0.01301	35.0	1.52	0 0.442	20 7.241	49.3	7.0379	1	284	15.5	5.49
343	0.02498	0.0	1.89	0 0.518	30 6.540	59.7	6.2669	1	422	15.9	8.65
344	0.02543	55.0	3.78	0 0.484	40 6.696	56.4	5.7321	5	370	17.6	7.18
345	0.03049	55.0	3.78	0 0.484	40 6.874	28.1	6.4654	5	370	17.6	4.61
346	0.03113	0.0	4.39	0 0.442	20 6.014	48.5	8.0136	3	352	18.8	10.53
347	0.06162	0.0	4.39	0 0.442	20 5.898	52.3	8.0136	3	352	18.8	12.67
348	0.01870	85.0	4.15	0 0.429	90 6.516	27.7	8.5353	4	351	17.9	6.36
349	0.01501	80.0	2.01	0 0.43	50 6.635	29.7	8.3440	4	280	17.0	5.99
350	0.02899	40.0	1.25	0 0.429	90 6.939	34.5	8.7921	1	335	19.7	5.89
351	0.06211	40.0	1.25	0 0.429	90 6.490	44.4	8.7921	1	335	19.7	5.98
352	0.07950	60.0	1.69	0 0.41	10 6.579	35.9	10.7103	4	411	18.3	5.49
353	0.07244	60.0	1.69	0 0.41	10 5.884	18.5	10.7103	4	411	18.3	7.79
354	0.01709	90.0	2.02	0 0.410	00 6.728	36.1	12.1265	5	187	17.0	4.50
355	0.04301	80.0	1.91	0 0.413	30 5.663	21.9	10.5857	4	334	22.0	8.05
356	0.10659	80.0	1.91	0 0.413	30 5.936	19.5	10.5857	4	334	22.0	5.57
357	8.98296	0.0	18.10	1 0.770	00 6.212	97.4	2.1222	24	666	20.2	17.60
358	3.84970	0.0	18.10	1 0.770	00 6.395	91.0	2.5052	24	666	20.2	13.27
359	5.20177	0.0	18.10	1 0.770	00 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 1	00.0	1.5106	24	666	20.2	13.33
369	4.89822	0.0 18.10	0 0.6310	4.970 10	00.0	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 10	00.0	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 10	00.0	1.1742	24	666	20.2	34.77
375	18.49820	0.0 18.10	0 0.6680	4.138 1	00.0	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 10	00.0	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 10	00.0	1.5804	24	666	20.2	23.60
384	7.99248	0.0 18.10	0 0.7000	5.520 10	00.0	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 10	00.0	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 1	00.0	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 10	00.0	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 1	00.0	1.5888	24	666	20.2	26.77
402	14.23620	0.0 18.10	0 0.6930	6.343 10	00.0	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		4.519 100.		24 666	20.2 36.98
416	18.08460	0.0 18.10		6.434 100.	0 1.8347	24 666	20.2 29.05
417	10.83420	0.0 18.10	0 0.6790		8 1.8195	24 666	20.2 25.79
418	25.94060	0.0 18.10		5.304 89.		24 666	20.2 26.64
419	73.53410	0.0 18.10		5.957 100.	0 1.8026	24 666	20.2 20.62
420	11.81230	0.0 18.10	0 0.7180			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		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.		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.		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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489
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491
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492
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493
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494
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495
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30	1.00245	0.0	8.14		0.5380			4.2390		307		11.98
31	1.13081	0.0	8.14		0.5380		94.1	4.2330		307		22.60
32	1.35472	0.0	8.14		0.5380			4.1750		307		13.04
33	1.38799	0.0	8.14		0.5380		82.0	3.9900		307		27.71
34	1.15172	0.0	8.14		0.5380		95.0	3.7872		307		18.35
35	1.61282	0.0	8.14	0	0.5380	6.096	96.9	3.7598		307		20.34
36	0.06417	0.0	5.96	0	0.4990		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		279	19.2	11.41
38	0.08014	0.0	5.96	0	0.4990		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 10	00.0	1.4394	4 437	21.2 34.41
143	3.32105	0.0 19.58	1 0.8710	5.403 10	00.0	1.3216	5 403	14.7 26.82
144	4.09740	0.0 19.58	0 0.8710	5.468 10	00.0	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 10	00.0	1.4191	5 403	14.7 27.80
147	2.15505	0.0 19.58	0 0.8710	5.628 10	00.0	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 10	00.0	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		96.0	1.7494	5 403	14.7 15.12
156	3.53501	0.0 19.58	1 0.8710		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		398	15.2	2.87
194	0.02187	60.0	2.93	0	0.4010	6.800	9.9	6.2196		265	15.6	5.03
195	0.01439	60.0	2.93	0	0.4010	6.604	18.8	6.2196		265	15.6	4.38
196	0.01381	80.0	0.46	0	0.4220		32.0	5.6484		255	14.4	2.97
197	0.04011	80.0	1.52	0	0.4040		34.1	7.3090		329	12.6	4.08
198	0.04666	80.0	1.52		0.4040		36.6	7.3090		329	12.6	8.61
199	0.03768	80.0	1.52		0.4040		38.3	7.3090		329	12.6	6.62
200	0.03150	95.0	1.47	0	0.4030		15.3	7.6534		402	17.0	4.56
201	0.01778	95.0	1.47		0.4030		13.9	7.6534		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 66	6 20.2 25.79
418	25.94060	0.0 18.10	0	0.6790 5.304	89.1	1.6475	24 66	6 20.2 26.64
419	73.53410	0.0 18.10	0	0.6790 5.957	100.0	1.8026	24 66	6 20.2 20.62
420	11.81230	0.0 18.10	0	0.7180 6.824	76.5	1.7940	24 66	6 20.2 22.74
421	11.08740	0.0 18.10	0	0.7180 6.411	100.0	1.8589	24 66	6 20.2 15.02
422	7.02259	0.0 18.10	0	0.7180 6.006	95.3	1.8746	24 66	6 20.2 15.70
423	12.04820	0.0 18.10	0	0.6140 5.648	87.6	1.9512	24 66	6 20.2 14.10
424	7.05042	0.0 18.10	0	0.6140 6.103	85.1	2.0218	24 66	6 20.2 23.29
425	8.79212	0.0 18.10	0	0.5840 5.565	70.6	2.0635	24 66	6 20.2 17.16
426	15.86030	0.0 18.10	0	0.6790 5.896	95.4	1.9096	24 66	6 20.2 24.39
427	12.24720	0.0 18.10	0	0.5840 5.837	59.7	1.9976	24 66	6 20.2 15.69
428	37.66190	0.0 18.10	0	0.6790 6.202	78.7	1.8629	24 66	6 20.2 14.52
429	7.36711	0.0 18.10	0	0.6790 6.193	78.1	1.9356	24 66	6 20.2 21.52
430	9.33889	0.0 18.10	0	0.6790 6.380	95.6	1.9682	24 66	6 20.2 24.08
431	8.49213	0.0 18.10	0	0.5840 6.348	86.1	2.0527	24 66	6 20.2 17.64
432	10.06230	0.0 18.10	0	0.5840 6.833	94.3	2.0882	24 66	6 20.2 19.69
433	6.44405	0.0 18.10	0	0.5840 6.425	74.8	2.2004	24 66	6 20.2 12.03
434	5.58107	0.0 18.10	0	0.7130 6.436	87.9	2.3158	24 66	6 20.2 16.22
435	13.91340	0.0 18.10	0	0.7130 6.208	95.0	2.2222	24 66	6 20.2 15.17
436	11.16040	0.0 18.10	0	0.7400 6.629	94.6	2.1247	24 66	6 20.2 23.27
437	14.42080	0.0 18.10	0	0.7400 6.461	93.3	2.0026	24 66	6 20.2 18.05
438	15.17720	0.0 18.10	0	0.7400 6.152	100.0	1.9142	24 66	6 20.2 26.45
439	13.67810	0.0 18.10	0	0.7400 5.935	87.9	1.8206	24 66	6 20.2 34.02
440	9.39063	0.0 18.10	0	0.7400 5.627	93.9	1.8172	24 66	6 20.2 22.88
441	22.05110	0.0 18.10	0	0.7400 5.818	92.4	1.8662	24 66	6 20.2 22.11
442	9.72418	0.0 18.10	0	0.7400 6.406	97.2	2.0651	24 66	6 20.2 19.52
443	5.66637	0.0 18.10	0	0.7400 6.219	100.0	2.0048	24 66	6 20.2 16.59
444	9.96654	0.0 18.10	0	0.7400 6.485	100.0	1.9784	24 66	6 20.2 18.85
445	12.80230	0.0 18.10	0	0.7400 5.854	96.6	1.8956	24 66	6 20.2 23.79
446	10.67180	0.0 18.10	0	0.7400 6.459	94.8	1.9879	24 66	6 20.2 23.98
447	6.28807	0.0 18.10	0	0.7400 6.341	96.4	2.0720	24 66	6 20.2 17.79
448	9.92485	0.0 18.10	0	0.7400 6.251	96.6	2.1980	24 66	6 20.2 16.44
449	9.32909	0.0 18.10	0	0.7130 6.185	98.7	2.2616	24 66	6 20.2 18.13
450	7.52601	0.0 18.10	0	0.7130 6.417	98.3	2.1850	24 66	6 20.2 19.31
451	6.71772	0.0 18.10	0	0.7130 6.749	92.6	2.3236	24 66	6 20.2 17.44
452	5.44114	0.0 18.10	0	0.7130 6.655	98.2	2.3552	24 66	6 20.2 17.73
453	5.09017	0.0 18.10	0	0.7130 6.297	91.8	2.3682	24 66	6 20.2 17.27
454	8.24809	0.0 18.10	0	0.7130 7.393	99.3	2.4527	24 66	6 20.2 16.74
455	9.51363	0.0 18.10	0	0.7130 6.728	94.1	2.4961	24 66	6 20.2 18.71
456	4.75237	0.0 18.10	0	0.7130 6.525	86.5	2.4358	24 66	6 20.2 18.13
457	4.66883	0.0 18.10	0	0.7130 5.976	87.9	2.5806	24 66	6 20.2 19.01
458	8.20058	0.0 18.10	0	0.7130 5.936	80.3	2.7792	24 66	6 20.2 16.94
459	7.75223	0.0 18.10	0	0.7130 6.301	83.7	2.7831	24 66	6 20.2 16.23

460	6.80117	0.0 18.10	0 0.7130 6.0	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 6.3	376 88.4	2.5671	24 666	20.2 14.65
463	6.65492	0.0 18.10	0 0.7130 6.3	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 6.3	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 5.9	952 84.7	2.8715	24 666	20.2 17.15
468	4.42228	0.0 18.10	0 0.5840 6.0	003 94.5	2.5403	24 666	20.2 21.32
469	15.57570	0.0 18.10			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 6.3		3.0993	24 666	20.2 12.87
473	3.56868	0.0 18.10	0 0.5800 6.4	437 75.0	2.8965	24 666	20.2 14.36
474	4.64689	0.0 18.10	0 0.6140 6.9	980 67.6	2.5329	24 666	20.2 11.66
475	8.05579	0.0 18.10	0 0.5840 5.4	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 6.4	484 93.6	2.3053	24 666	20.2 18.68
478	15.02340	0.0 18.10	0 0.6140 5.3	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 6.3	229 88.0	1.9512	24 666	20.2 13.11
481	5.82401	0.0 18.10	0 0.5320 6.3	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 7.0	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 5.8	871 41.9	3.7240	24 666	20.2 13.34
486	3.67367	0.0 18.10	0 0.5830 6.3	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 5.9	905 53.2	3.1523	24 666	20.2 11.45
489	0.15086	0.0 27.74	0 0.6090 5.4	454 92.7	1.8209	4 711	20.1 18.06
490	0.18337	0.0 27.74	0 0.6090 5.4	414 98.3	1.7554	4 711	20.1 23.97
491	0.20746	0.0 27.74	0 0.6090 5.0	093 98.0	1.8226	4 711	20.1 29.68
492	0.10574	0.0 27.74	0 0.6090 5.9	983 98.8	1.8681	4 711	20.1 18.07
493	0.11132	0.0 27.74	0 0.6090 5.9	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 5.9	926 42.6	2.3817	6 391	19.2 13.59
496	0.17899	0.0 9.69	0 0.5850 5.0	670 28.8	2.7986	6 391	19.2 17.60
497	0.28960	0.0 9.69	0 0.5850 5.3	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 6.0	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 6.0	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

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2	0.02731	0.0	7.07	0 0.4690		78.9	4.9671	2 242	17.8 9.14
3	0.02729	0.0	7.07		7.185	61.1	4.9671	2 242	17.8 4.03
4	0.03237	0.0	2.18		6.998	45.8	6.0622	3 222	18.7 2.94
5	0.06905	0.0	2.18		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		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		21.8	5.4011	3 252	18.3 4.32
41	0.03359	75.0	2.95	0 0.4280		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		6.6	5.7209	3 233	17.9 5.81

44	0.15936		6.91		0.4480		6.5	5.7209		233	17.9	
45	0.12269		6.91	_	0.4480		40.0	5.7209		233	17.9	9.55
46	0.17142		6.91	0			33.8	5.1004		233		10.21
47	0.18836		6.91	0	0.4480		33.3	5.1004		233		14.15
48	0.22927		6.91	0			85.5	5.6894		233		18.80
49	0.25387		6.91	0	0.4480		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

07	0 05100	0 0	4 40	^	0 4400 6 045	45 4	4 4070	2	047	40 F	10.00
87	0.05188	0.0	4.49		0.4490 6.015		4.4272		247	18.5	
88	0.07151	0.0	4.49		0.4490 6.121		3.7476		247	18.5	8.44
89	0.05660	0.0	3.41		0.4890 7.007		3.4217		270	17.8	5.50
90	0.05302	0.0	3.41		0.4890 7.079		3.4145		270	17.8	5.70
91	0.04684	0.0	3.41		0.4890 6.417		3.0923		270	17.8	8.81
92	0.03932	0.0	3.41		0.4890 6.405		3.0921		270	17.8	8.20
93	0.04203		15.04		0.4640 6.442		3.6659		270	18.2	8.16
94	0.02875		15.04	0	0.4640 6.211		3.6659		270	18.2	6.21
95	0.04294		15.04	0			3.6150		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		0.5470 5.913		2.3534		432	17.8	
114	0.22212	0.0	10.01	0	0.5470 6.092		2.5480		432	17.8	17.09
115	0.14231		10.01		0.5470 6.254		2.2565		432	17.8	
116	0.17134	0.0	10.01		0.5470 5.928		2.4631		432	17.8	
117	0.13158		10.01		0.5470 6.176		2.7301		432	17.8	
118	0.15098		10.01		0.5470 6.021	82.6	2.7474		432	17.8	
119	0.13058		10.01		0.5470 5.872		2.4775		432	17.8	
120	0.14476		10.01		0.5470 5.731		2.7592		432	17.8	
121	0.06899		25.65		0.5810 5.870		2.2577		188	19.1	
122	0.07165		25.65		0.5810 6.004		2.1974		188	19.1	
123	0.09299		25.65		0.5810 5.961		2.0869		188	19.1	
124	0.15038		25.65		0.5810 5.856		1.9444		188	19.1	
125	0.09849		25.65		0.5810 5.879		2.0063		188	19.1	
126	0.16902		25.65		0.5810 5.986		1.9929		188	19.1	
127	0.10302		25.65		0.5810 5.613		1.7572		188	19.1	
128	0.35735		21.89		0.6240 5.693		1.7883		437	21.2	
129	0.23913		21.89		0.6240 6.431				437	21.2	
129	0.32343	0.0	21.09	U	0.0240 0.431	30.0	1.8125	4	431	21.2	10.09

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		2.5961		296	16.6	14.69
174	0.09178	0.0	4.05		0.5100		84.1	2.6463		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		0.5100		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		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		0.4110		27.7	5.1167		245	19.2	
293	0.03615	80.0	4.95		0.4110		23.4	5.1167		245	19.2	
294	0.08265		13.92		0.4370		18.4	5.5027		289	16.0	
295	0.08199		13.92		0.4370		42.3	5.5027		289		10.40
296	0.12932		13.92	0			31.1	5.9604		289	16.0	6.27
297	0.05372		13.92		0.4370		51.0	5.9604		289	16.0	7.39
298	0.14103		13.92		0.4370		58.0	6.3200		289		15.84
299	0.06466	70.0	2.24		0.4000		20.1	7.8278		358	14.8	4.97
300	0.05561	70.0	2.24		0.4000		10.0	7.8278		358	14.8	
301	0.04417	70.0	2.24		0.4000		47.4	7.8278		358	14.8	
001	3.01111		2.2I	J	3.1000	5.511	1, . 1	1.0210	J	550	14.0	0.01

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	2 17.7 5.4917	7 329	16.1 4.86
305	0.05515	33.0	2.18	0 0.4720 7.236	3 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	2 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	2 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		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	2 71.7 4.0317	4 304	18.4 15.94
319	0.40202	0.0	9.90	0 0.5440 6.382	2 67.2 3.5325	4 304	18.4 10.36
320	0.47547	0.0	9.90	0 0.5440 6.113	8 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	3 74.3 4.7211	5 287	19.6 11.74
325	0.34109	0.0	7.38	0 0.4930 6.415	5 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		5 287	19.6 6.15
328	0.24103	0.0	7.38	0 0.4930 6.083	3 43.7 5.4159	5 287	19.6 12.79
329	0.06617	0.0	3.24	0 0.4600 5.868	3 25.8 5.2146	4 430	16.9 9.97
330	0.06724	0.0	3.24	0 0.4600 6.333	3 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		1 304	16.9 12.43
333	0.03466	35.0	6.06	0 0.4379 6.031		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		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		5 224	20.2 9.80
338	0.03041	0.0	5.19	0 0.5150 5.895		5 224	20.2 10.56
339	0.03306	0.0	5.19	0 0.5150 6.059		5 224	20.2 8.51
340	0.05497	0.0	5.19	0 0.5150 5.985		5 224	20.2 9.74
341	0.06151	0.0	5.19	0 0.5150 5.968		5 224	20.2 9.29
342	0.01301	35.0	1.52	0 0.4420 7.241		1 284	15.5 5.49
343	0.02498	0.0	1.89	0 0.5180 6.540		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		0.7000			1.5331		666		24.56
385	20.08490	0.0	18.10	0	0.7000	4.368	91.2	1.4395	24	666		30.63
	16.81180		18.10		0.7000			1.4261		666		30.81
387	24.39380		18.10	0	0.7000	4.652	100.0	1.4672		666		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		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		6.219		2.0048	24 666	20.2 16.59
444	9.96654	0.0 18.10		6.485		1.9784	24 666	20.2 18.85
445	12.80230	0.0 18.10		5.854	96.6	1.8956	24 666	20.2 23.79
446	10.67180	0.0 18.10		6.459	94.8	1.9879	24 666	20.2 23.98
447	6.28807	0.0 18.10		6.341	96.4	2.0720	24 666	20.2 17.79
448	9.92485	0.0 18.10		6.251	96.6	2.1980	24 666	20.2 16.44
449	9.32909	0.0 18.10		6.185	98.7	2.2616	24 666	20.2 18.13
450	7.52601	0.0 18.10		6.417	98.3	2.1850	24 666	20.2 19.31
451	6.71772	0.0 18.10		6.749	92.6	2.3236	24 666	20.2 17.44
452	5.44114	0.0 18.10		6.655	98.2	2.3552	24 666	20.2 17.73
453	5.09017	0.0 18.10		6.297	91.8	2.3682	24 666	20.2 17.27
454	8.24809	0.0 18.10		7.393	99.3	2.4527	24 666	20.2 16.74
455	9.51363	0.0 18.10		6.728	94.1	2.4961	24 666	20.2 18.71
456	4.75237	0.0 18.10		6.525	86.5	2.4358	24 666	20.2 18.13
457	4.66883	0.0 18.10		5.976	87.9	2.5806	24 666	20.2 19.01
458	8.20058	0.0 18.10		5.936	80.3	2.7792	24 666	20.2 16.94
459	7.75223	0.0 18.10		6.301	83.7	2.7831	24 666	20.2 16.23
460	6.80117	0.0 18.10		6.081	84.4	2.7175	24 666	20.2 14.70
461	4.81213	0.0 18.10		6.701	90.0	2.5975	24 666	20.2 16.42
462	3.69311	0.0 18.10		6.376	88.4	2.5671	24 666	20.2 14.65
463	6.65492	0.0 18.10		6.317	83.0	2.7344	24 666	20.2 13.99
464	5.82115	0.0 18.10	0 0.7130		89.9	2.8016	24 666	20.2 10.29
465	7.83932	0.0 18.10	0 0.6550		65.4	2.9634	24 666	20.2 13.22
466	3.16360	0.0 18.10	0 0.6550			3.0665	24 666	20.2 14.13
467	3.77498	0.0 18.10	0 0.6550		84.7	2.8715	24 666	20.2 17.15
468	4.42228	0.0 18.10	0 0.5840		94.5	2.5403	24 666	20.2 21.32
	15.57570	0.0 18.10	0 0.5800		71.0	2.9084	24 666	20.2 18.13
	13.07510	0.0 18.10	0 0.5800		56.7	2.8237	24 666	20.2 14.76
471	4.34879	0.0 18.10	0 0.5800		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		53.2	3.1523	24	666	20.2	11.45
489	0.15086	0.0 27.74	0	0.6090		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		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		391		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		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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