

Untitled

asaa

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R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed      dist
##  Min.   : 4.0    Min.   :  2.00
## 1st Qu.:12.0    1st Qu.: 26.00
##  Median :15.0    Median : 36.00
##   Mean  :15.4    Mean   : 42.98
## 3rd Qu.:19.0    3rd Qu.: 56.00
##   Max.  :25.0    Max.    :120.00
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

```
library(oibiostat)
data("famuss")
famuss
```

##	ndrm.ch	drm.ch	sex	age	race	height	weight	actn3.r577x	bmi
## 1	40.0	40.0	Female	27	Caucasian	65.0	199.0	CC	33.112
## 2	25.0	0.0	Male	36	Caucasian	71.7	189.0	CT	25.845
## 3	40.0	0.0	Female	24	Caucasian	65.0	134.0	CT	22.296
## 4	125.0	0.0	Female	40	Caucasian	68.0	171.0	CT	25.998
## 5	40.0	20.0	Female	32	Caucasian	61.0	118.0	CC	22.293
## 6	75.0	0.0	Female	24	Hispanic	62.2	120.0	CT	21.805
## 7	100.0	0.0	Female	30	Caucasian	65.0	134.0	TT	22.296
## 9	57.1	-14.3	Female	28	Caucasian	68.0	162.0	CT	24.629
## 10	33.3	0.0	Male	27	Hispanic	68.2	189.0	CC	28.566
## 12	20.0	0.0	Female	30	Caucasian	62.2	120.0	CT	21.805
## 13	25.0	25.0	Female	20	Caucasian	69.0	131.0	CT	19.343
## 14	100.0	25.0	Female	23	African Am	62.0	108.0	CT	19.751
## 16	28.6	12.5	Female	24	Caucasian	67.2	158.0	TT	24.597
## 19	7.1	-7.1	Male	34	Caucasian	73.0	233.0	CT	30.737
## 20	75.0	20.0	Female	31	Caucasian	67.5	141.0	CC	21.755
## 21	12.5	0.0	Male	38	Caucasian	70.0	155.0	CT	22.238
## 22	60.0	0.0	Female	39	African Am	68.0	178.0	CC	27.062
## 23	40.0	33.3	Female	26	African Am	61.0	103.0	CC	19.460
## 24	20.0	0.0	Female	30	Caucasian	69.0	193.0	TT	28.498

## 25	25.0	-13.3	Male	35	Caucasian	68.5	147.0	TT 22.024
## 28	37.5	-10.0	Male	33	Asian	66.5	145.0	CT 23.050
## 31	0.0	0.0	Female	23	Caucasian	67.5	148.0	CT 22.835
## 32	0.0	25.0	Female	22	Other	63.0	114.0	CC 20.192
## 33	40.0	20.0	Female	25	African Am	68.5	133.0	CC 19.926
## 35	133.3	0.0	Female	20	Caucasian	64.0	111.0	CC 19.051
## 36	25.0	0.0	Female	25	Hispanic	60.5	107.0	CT 20.551
## 39	33.3	-16.7	Female	24	Caucasian	67.5	142.0	CC 21.910
## 41	40.0	0.0	Male	26	Other	67.5	194.0	CT 29.933
## 43	33.3	16.7	Female	38	African Am	65.5	192.0	TT 31.461
## 45	33.3	-16.7	Female	31	Caucasian	69.0	202.0	TT 29.827
## 47	40.0	-20.0	Female	22	Hispanic	66.0	160.0	TT 25.822
## 50	100.0	0.0	Female	22	Caucasian	62.5	139.0	TT 25.016
## 51	75.0	20.0	Female	26	Asian	65.0	164.0	TT 27.288
## 52	22.2	-20.0	Male	27	African Am	73.5	141.0	TT 18.348
## 53	100.0	25.0	Female	31	Caucasian	65.0	128.0	TT 21.298
## 54	20.0	0.0	Female	31	Asian	64.5	112.0	CC 18.926
## 55	33.3	0.0	Female	35	Asian	65.0	140.0	CC 23.295
## 57	27.3	16.7	Male	33	Caucasian	74.5	261.0	CT 33.059
## 58	20.0	20.0	Female	21	Caucasian	62.0	124.0	CC 22.677
## 62	6.3	16.7	Female	40	Hispanic	69.5	132.0	TT 19.211
## 63	30.0	0.0	Female	23	Hispanic	63.2	129.0	TT 22.704
## 64	8.3	50.0	Female	32	African Am	66.0	187.0	CC 30.179
## 65	10.0	-15.0	Male	35	Caucasian	70.0	186.0	CT 26.685
## 66	25.0	8.3	Female	37	Caucasian	66.3	147.0	CC 23.510
## 67	62.5	0.0	Female	20	Caucasian	67.0	138.0	TT 21.611
## 68	22.2	11.1	Male	27	Caucasian	64.5	138.0	TT 23.319
## 69	16.7	0.0	Male	33	Other	67.0	134.0	CC 20.985
## 70	33.3	0.0	Female	27	Caucasian	64.3	125.0	TT 21.254
## 71	0.0	-14.3	Female	22	Hispanic	61.0	126.0	TT 23.805
## 72	0.0	0.0	Female	39	Caucasian	66.7	136.0	CC 21.490
## 73	66.7	16.7	Female	20	Caucasian	66.5	115.0	CC 18.281
## 74	50.0	0.0	Female	35	Caucasian	64.7	130.0	CC 21.832
## 76	50.0	14.3	Female	22	Other	72.0	156.0	CT 21.155
## 77	62.5	10.0	Female	33	Hispanic	65.7	119.0	CC 19.381
## 78	66.7	0.0	Female	30	Caucasian	66.0	146.0	CC 23.562
## 129	75.0	22.2	Male	20	Caucasian	69.0	129.0	TT 19.048
## 130	27.3	0.0	Male	19	Caucasian	68.0	208.0	CC 31.623
## 131	44.4	0.0	Male	26	Caucasian	65.5	135.0	TT 22.121
## 132	37.5	25.0	Female	20	African Am	63.0	183.0	CC 32.413
## 133	44.4	10.0	Male	20	Caucasian	69.0	177.0	CC 26.135
## 136	30.0	0.0	Male	19	Caucasian	70.0	159.0	CT 22.812
## 137	40.0	0.0	Female	18	Other	68.0	128.0	CT 19.460
## 138	33.3	16.7	Female	19	Asian	65.0	126.0	CT 20.965
## 144	27.3	16.7	Male	20	Caucasian	67.0	225.0	CC 35.236
## 148	27.3	0.0	Male	19	Caucasian	66.0	156.0	CC 25.176
## 152	14.3	16.7	Female	19	Caucasian	66.5	147.0	CC 23.368
## 154	60.0	0.0	Female	19	Caucasian	64.5	117.0	CT 19.771
## 157	33.3	0.0	Female	34	Asian	62.5	130.0	CC 23.396
## 158	60.0	20.0	Female	20	Caucasian	67.0	164.0	CT 25.683
## 160	57.1	16.7	Female	21	Caucasian	68.0	149.0	CT 22.653
## 161	44.4	0.0	Male	25	Caucasian	70.0	164.0	TT 23.529
## 162	50.0	33.3	Male	21	Asian	68.0	146.0	CT 22.197
## 165	60.0	40.0	Female	20	Caucasian	64.0	134.0	CC 22.999

## 167	36.4	9.1	Male	22	Asian	68.0	178.0	TT 27.062
## 168	45.5	-14.3	Male	23	Hispanic	67.0	160.0	CT 25.057
## 173	50.0	83.3	Female	17	Caucasian	67.5	135.0	CT 20.830
## 174	66.7	16.7	Female	18	Asian	62.0	154.0	TT 28.164
## 175	71.4	0.0	Female	18	Other	67.0	148.0	CT 23.178
## 176	61.5	30.8	Male	21	Caucasian	66.5	196.0	CC 31.158
## 178	33.3	0.0	Female	20	Caucasian	68.0	180.0	CT 27.366
## 179	72.7	0.0	Male	19	Caucasian	67.0	195.0	CC 30.538
## 182	57.1	12.5	Female	20	Caucasian	69.2	150.0	CC 22.021
## 183	80.0	16.7	Female	22	Caucasian	65.5	149.0	CT 24.415
## 184	58.3	16.7	Male	18	Hispanic	71.0	227.0	CT 31.657
## 186	66.7	0.0	Female	18	Other	62.5	152.0	CT 27.355
## 188	140.0	16.7	Female	19	Caucasian	62.0	188.0	TT 34.382
## 189	33.3	0.0	Male	19	Caucasian	69.0	160.0	TT 23.625
## 191	45.5	18.2	Male	22	African Am	70.2	162.0	TT 23.110
## 192	50.0	0.0	Female	22	Asian	68.0	140.0	TT 21.285
## 193	60.0	20.0	Female	18	African Am	66.0	132.0	TT 21.303
## 194	13.3	7.7	Male	23	Caucasian	75.5	291.0	TT 35.888
## 195	38.5	0.0	Male	23	Hispanic	66.2	156.0	TT 25.024
## 197	44.4	22.2	Male	25	Hispanic	68.0	179.0	CT 27.214
## 200	125.0	20.0	Female	23	Caucasian	64.0	133.0	TT 22.827
## 201	40.0	0.0	Female	23	Caucasian	65.0	114.0	CT 18.969
## 202	33.3	0.0	Female	22	Caucasian	71.0	129.0	CT 17.990
## 204	62.5	25.0	Male	19	Caucasian	72.0	161.0	TT 21.833
## 205	100.0	43.4	Female	23	Caucasian	63.5	195.0	CT 33.997
## 206	50.0	25.0	Male	18	Caucasian	74.0	183.0	CT 23.493
## 209	114.3	25.0	Female	19	Caucasian	63.0	179.0	CT 31.705
## 213	33.3	0.0	Male	26	Caucasian	67.0	151.0	TT 23.647
## 214	50.0	16.7	Female	27	Caucasian	61.0	179.0	TT 33.818
## 216	100.0	25.0	Female	23	African Am	62.0	130.0	CT 23.775
## 217	75.0	0.0	Female	23	Caucasian	63.0	127.0	TT 22.495
## 218	30.0	0.0	Male	28	Caucasian	69.0	186.0	CT 27.464
## 219	100.0	0.0	Female	25	African Am	66.0	141.0	CC 22.756
## 220	60.0	-7.7	Female	19	Caucasian	64.0	141.0	TT 24.200
## 221	34.6	6.7	Male	19	Caucasian	71.0	242.0	CT 33.748
## 222	34.8	20.0	Male	28	Caucasian	72.0	153.0	TT 20.748
## 223	122.2	16.7	Female	22	Caucasian	68.0	190.0	CC 28.886
## 224	37.5	-11.1	Female	26	Asian	63.0	125.0	CT 22.140
## 225	19.2	-3.6	Male	26	Asian	69.0	203.0	CC 29.975
## 226	120.0	0.0	Female	20	Caucasian	61.2	101.0	CT 18.957
## 229	81.8	16.7	Female	19	Caucasian	66.0	131.0	CT 21.142
## 230	18.2	0.0	Female	18	Caucasian	65.0	125.0	TT 20.799
## 232	42.9	0.0	Female	24	Other	65.2	193.0	CT 31.917
## 234	111.1	20.0	Female	23	African Am	65.0	121.0	CC 20.133
## 235	90.0	9.1	Female	18	Caucasian	57.3	136.0	CT 29.170
## 236	83.3	0.0	Female	19	Caucasian	63.5	153.0	CT 26.675
## 237	90.0	0.0	Female	18	Caucasian	65.7	131.0	TT 21.335
## 238	114.3	25.0	Female	18	Caucasian	67.0	128.0	CC 20.045
## 239	72.7	36.4	Female	18	African Am	65.5	115.0	CC 18.844
## 240	109.1	9.1	Female	20	African Am	65.5	123.0	CT 20.155
## 241	60.0	12.5	Female	19	Asian	60.0	105.0	TT 20.504
## 242	114.3	20.0	Female	20	Caucasian	63.0	133.0	CC 23.557
## 243	100.0	18.2	Female	18	Caucasian	63.0	109.0	CC 19.306
## 322	16.7	0.0	Male	33	Caucasian	70.0	177.0	CT 25.394

## 323	80.0	20.0	Female	31	Caucasian	66.0	160.0	TT 25.822
## 326	66.7	16.7	Female	25	Caucasian	64.0	196.0	CC 33.640
## 327	100.0	0.0	Female	19	Caucasian	69.0	165.0	CT 24.364
## 328	25.0	0.0	Male	24	Other	62.5	147.0	CT 26.455
## 329	62.5	11.1	Male	34	Caucasian	73.0	169.0	CC 22.294
## 332	27.3	-8.3	Male	23	Caucasian	69.5	136.0	CT 19.794
## 333	60.0	0.0	Female	21	Other	62.5	150.0	CT 26.995
## 334	50.0	0.0	Female	27	Hispanic	57.5	109.0	TT 23.176
## 335	100.0	-20.0	Female	36	African Am	62.0	144.0	CC 26.335
## 336	20.0	20.0	Female	33	African Am	64.5	126.0	CC 21.292
## 337	100.0	0.0	Female	34	Caucasian	67.5	123.0	TT 18.978
## 338	20.0	7.4	Male	40	Caucasian	72.5	212.0	CC 28.354
## 339	40.0	0.0	Female	26	Caucasian	64.3	133.0	CT 22.614
## 340	60.0	0.0	Female	28	Caucasian	64.8	124.0	CT 20.760
## 341	100.0	25.0	Female	34	Caucasian	69.8	140.0	CT 20.201
## 342	28.6	0.0	Female	34	Caucasian	69.8	130.0	CT 18.758
## 344	15.4	7.1	Male	28	African Am	69.3	256.0	CT 37.474
## 345	50.0	16.7	Male	27	Caucasian	68.2	144.0	CT 21.765
## 346	5.9	0.0	Male	29	Caucasian	66.5	169.0	CC 26.866
## 347	55.6	20.0	Male	22	African Am	68.5	173.0	CC 25.919
## 349	60.0	0.0	Female	29	Caucasian	62.5	163.0	CT 29.335
## 350	150.0	0.0	Female	38	Caucasian	65.0	155.0	TT 25.791
## 351	50.0	0.0	Female	28	Asian	61.0	112.0	CC 21.160
## 354	16.7	8.3	Male	34	Caucasian	70.0	305.0	CT 43.758
## 355	33.3	-16.7	Female	21	Caucasian	63.0	114.0	TT 20.192
## 356	18.8	13.3	Male	27	Other	72.0	228.0	CT 30.919
## 357	20.0	-33.3	Female	39	Caucasian	65.0	173.0	CT 28.786
## 359	42.9	0.0	Male	28	Asian	71.0	144.0	CC 20.082
## 360	25.0	0.0	Female	30	Caucasian	64.2	135.0	CT 23.026
## 361	50.0	0.0	Female	21	Caucasian	65.8	138.0	CT 22.407
## 362	50.0	16.7	Female	31	Caucasian	69.2	202.0	TT 29.655
## 364	100.0	0.0	Female	22	Hispanic	62.5	157.0	CC 28.255
## 365	40.0	0.0	Female	23	Caucasian	65.0	114.0	CC 18.969
## 366	116.7	0.0	Female	26	African Am	65.5	182.0	CC 29.823
## 368	26.7	0.0	Male	39	Caucasian	69.0	191.0	CT 28.203
## 370	50.0	-16.7	Female	23	Caucasian	66.0	127.0	CT 20.496
## 371	25.0	0.0	Male	38	Caucasian	70.5	209.0	CT 29.561
## 372	57.1	-14.3	Male	22	Caucasian	66.0	167.0	CT 26.952
## 373	40.0	0.0	Female	34	Caucasian	62.0	126.0	CC 23.043
## 374	40.0	-16.7	Female	36	Caucasian	66.0	143.0	CT 23.078
## 375	50.0	10.0	Male	30	Caucasian	68.8	211.0	CT 31.337
## 377	150.0	0.0	Female	21	Caucasian	65.0	131.0	TT 21.797
## 378	18.2	-7.7	Male	21	Caucasian	68.7	172.0	CT 25.619
## 379	50.0	0.0	Male	32	Asian	68.7	155.0	TT 23.087
## 381	36.4	8.3	Male	25	Other	72.5	177.0	TT 23.673
## 383	33.3	0.0	Female	23	Caucasian	63.0	138.0	CT 24.443
## 384	66.7	0.0	Female	20	Caucasian	62.5	98.0	TT 17.637
## 385	57.1	10.0	Male	30	Asian	65.5	147.0	CT 24.087
## 386	40.0	0.0	Male	39	Asian	69.0	132.0	CC 19.491
## 387	20.0	-8.3	Male	22	Asian	71.0	193.0	CT 26.915
## 388	20.0	0.0	Male	29	Asian	68.0	166.0	CC 25.237
## 389	20.0	20.0	Female	24	Asian	60.5	140.0	CC 26.889
## 392	36.4	0.0	Male	36	Hispanic	65.5	241.0	CT 39.490
## 394	42.9	14.3	Female	38	Hispanic	60.5	171.0	TT 32.843

## 395	18.8	0.0	Male	32	Hispanic	68.2	190.0	CC 28.717
## 396	30.8	-6.7	Male	32	Caucasian	73.8	217.0	CC 28.009
## 397	16.7	0.0	Female	36	Caucasian	63.7	184.0	CC 31.878
## 477	50.0	14.3	Male	23	Caucasian	69.4	175.0	CC 25.543
## 478	10.0	-10.0	Male	25	Caucasian	70.4	169.0	CT 23.972
## 479	75.0	25.0	Female	26	Other	67.6	175.0	CT 26.922
## 481	33.3	-16.7	Female	26	Caucasian	67.0	141.0	CC 22.081
## 482	33.3	0.0	Male	22	Caucasian	75.0	213.0	CC 26.620
## 483	54.5	18.2	Male	20	Caucasian	72.0	177.0	TT 24.003
## 484	18.2	10.0	Male	21	Caucasian	65.0	143.0	CT 23.794
## 485	50.0	0.0	Male	25	Asian	67.6	144.0	CC 22.153
## 486	80.0	0.0	Female	21	Caucasian	60.7	141.0	CC 26.903
## 489	75.0	0.0	Female	23	Caucasian	64.5	132.0	CT 22.305
## 490	20.0	-10.0	Male	21	Caucasian	73.2	168.0	TT 22.042
## 492	22.2	0.0	Male	22	Caucasian	67.5	155.0	CC 23.916
## 494	44.4	-20.0	Male	21	Caucasian	70.0	159.0	CC 22.812
## 495	20.0	-27.3	Male	23	Caucasian	70.0	144.0	TT 20.660
## 496	150.0	20.0	Female	20	Caucasian	64.0	134.0	CT 22.999
## 498	44.4	9.1	Male	25	Caucasian	69.5	160.0	TT 23.287
## 500	75.0	12.5	Male	18	Caucasian	71.2	155.0	CC 21.494
## 501	60.0	0.0	Male	18	Caucasian	72.4	185.0	CT 24.811
## 502	37.5	0.0	Male	24	Caucasian	71.0	168.0	CT 23.429
## 505	62.5	25.0	Male	22	Caucasian	74.4	169.0	TT 21.463
## 506	27.3	8.3	Male	20	Caucasian	75.3	187.0	CT 23.185
## 507	42.9	25.0	Male	20	Caucasian	66.9	152.0	CT 23.875
## 508	25.0	7.7	Male	29	Caucasian	72.4	186.0	TT 24.945
## 509	33.3	10.0	Male	29	Asian	66.5	144.0	CT 22.892
## 511	25.0	8.3	Male	22	Caucasian	71.0	183.0	CT 25.521
## 512	36.4	0.0	Male	30	Other	70.3	143.0	CC 20.341
## 513	22.2	9.1	Male	25	Caucasian	68.1	176.0	CC 26.679
## 514	33.3	14.3	Female	20	Caucasian	66.3	146.0	CC 23.350
## 517	57.1	0.0	Male	33	Caucasian	70.5	159.0	CT 22.489
## 518	30.0	10.0	Male	25	Caucasian	67.9	158.0	TT 24.092
## 522	60.0	20.0	Female	19	Caucasian	63.4	121.0	CT 21.162
## 523	200.0	0.0	Female	18	Caucasian	67.0	160.0	CT 25.057
## 524	100.0	20.0	Female	18	Caucasian	67.0	192.0	CT 30.068
## 525	100.0	40.0	Female	19	Caucasian	67.0	151.0	CC 23.647
## 526	62.5	0.0	Male	18	Caucasian	67.6	139.0	CT 21.383
## 527	40.0	18.2	Male	19	Caucasian	70.0	177.0	TT 25.394
## 528	71.4	0.0	Male	18	Caucasian	67.0	151.0	CT 23.647
## 529	60.0	0.0	Female	18	Caucasian	64.4	145.0	CT 24.578
## 530	87.5	0.0	Male	18	Caucasian	67.0	125.0	CT 19.576
## 531	100.0	37.5	Male	18	Caucasian	71.0	162.0	CT 22.592
## 532	33.3	8.3	Male	19	Caucasian	74.0	154.0	CT 19.770
## 533	100.0	0.0	Female	19	Caucasian	63.0	124.0	CT 21.963
## 534	100.0	0.0	Female	19	Caucasian	65.5	126.0	CT 20.646
## 535	33.3	0.0	Female	19	Caucasian	64.7	125.0	CC 20.992
## 536	100.0	20.0	Male	18	Caucasian	67.3	139.0	CC 21.574
## 537	30.0	0.0	Male	18	Caucasian	68.0	192.0	CT 29.190
## 538	60.0	20.0	Female	19	Caucasian	64.0	122.0	TT 20.939
## 539	50.0	9.1	Male	21	Caucasian	70.0	157.0	CC 22.525
## 540	250.0	50.0	Female	19	Caucasian	62.1	116.0	CT 21.146
## 541	100.0	0.0	Female	18	Caucasian	66.6	143.0	CT 22.664
## 543	120.0	20.0	Female	20	Caucasian	66.5	134.0	CT 21.302

## 544	66.7	16.7	Female	19	Caucasian	65.1	166.0	CC 27.536
## 545	120.0	40.0	Female	18	Caucasian	65.0	134.0	CT 22.296
## 547	50.0	0.0	Male	19	Caucasian	71.0	153.0	CC 21.337
## 551	100.0	20.0	Female	18	Caucasian	67.3	154.0	CT 23.903
## 552	75.0	0.0	Female	18	Caucasian	67.0	131.0	CT 20.515
## 555	50.0	10.0	Male	24	Caucasian	72.0	168.0	CC 22.782
## 556	33.3	0.0	Male	36	Caucasian	71.0	191.0	CT 26.636
## 560	30.0	0.0	Male	20	Caucasian	71.0	159.0	CC 22.174
## 561	80.0	16.7	Male	21	Caucasian	68.0	162.0	CT 24.629
## 563	20.0	0.0	Male	20	Caucasian	71.2	151.0	CT 20.940
## 564	85.7	0.0	Male	24	Caucasian	71.3	158.0	CT 21.849
## 566	33.3	11.1	Male	18	Caucasian	70.3	162.0	CC 23.044
## 569	50.0	0.0	Female	20	Caucasian	61.0	114.0	CC 21.538
## 571	125.0	0.0	Female	23	Caucasian	64.0	182.0	TT 31.237
## 572	38.5	16.7	Male	19	Caucasian	66.5	164.0	TT 26.071
## 573	75.0	16.7	Male	25	Caucasian	67.7	217.0	CC 33.284
## 574	50.0	27.3	Male	26	Other	67.8	121.0	CC 18.505
## 575	85.7	11.1	Male	24	Other	72.6	135.0	TT 18.006
## 579	150.0	80.0	Male	30	Other	66.5	105.0	CC 16.692
## 582	57.1	11.1	Male	24	Caucasian	67.2	129.0	CT 20.082
## 646	30.0	0.0	Male	25	Caucasian	68.0	143.0	TT 21.741
## 647	100.0	0.0	Female	26	Caucasian	62.5	151.0	CT 27.175
## 648	62.5	0.0	Male	25	Caucasian	67.5	191.0	CT 29.470
## 649	25.0	0.0	Female	39	Caucasian	66.0	135.0	CT 21.787
## 650	42.9	33.3	Female	21	Caucasian	65.5	163.0	CC 26.709
## 651	62.5	0.0	Male	25	Caucasian	69.0	148.0	CT 21.853
## 652	23.1	-12.5	Male	22	Caucasian	72.0	212.0	CC 28.749
## 653	125.0	50.0	Female	23	Caucasian	63.5	165.0	CC 28.767
## 654	120.0	14.3	Female	22	Caucasian	66.0	248.0	TT 40.024
## 655	57.1	0.0	Male	34	Asian	57.0	157.0	TT 33.971
## 656	16.7	0.0	Female	34	Caucasian	65.0	203.0	CT 33.777
## 657	33.3	6.3	Male	21	Caucasian	74.0	317.0	CC 40.696
## 658	33.3	10.0	Male	21	Caucasian	68.0	132.0	CT 20.068
## 659	45.5	-8.3	Male	28	Caucasian	73.0	195.0	CT 25.724
## 660	60.0	18.2	Male	24	Caucasian	65.0	150.0	TT 24.959
## 662	40.0	16.7	Male	25	Caucasian	75.3	190.0	CT 23.557
## 663	9.1	0.0	Male	23	Asian	64.5	174.0	CT 29.403
## 664	100.0	18.2	Male	24	Caucasian	72.0	150.0	TT 20.341
## 665	25.0	-7.7	Male	21	Caucasian	67.0	232.0	CT 36.332
## 666	15.4	0.0	Male	20	Caucasian	68.0	170.0	CC 25.846
## 667	40.0	0.0	Female	22	Caucasian	63.0	151.0	CT 26.746
## 668	33.3	-16.7	Female	33	Caucasian	63.5	187.0	CT 32.602
## 669	37.5	25.0	Male	26	Asian	71.0	146.0	CT 20.361
## 670	80.0	20.0	Female	23	Caucasian	67.0	164.0	CT 25.683
## 671	80.0	50.0	Female	22	Caucasian	67.2	144.0	CC 22.417
## 672	40.0	0.0	Female	23	Caucasian	62.0	123.0	CC 22.495
## 675	60.0	20.0	Female	18	Asian	60.0	123.0	CT 24.019
## 676	50.0	0.0	Female	20	Caucasian	59.5	161.0	CT 31.970
## 677	66.7	23.1	Male	25	Caucasian	69.5	203.0	CT 29.545
## 678	27.3	0.0	Male	30	Hispanic	66.5	173.0	TT 27.502
## 679	50.0	10.0	Male	24	Caucasian	68.5	152.0	TT 22.773
## 681	57.1	0.0	Male	23	Asian	64.7	153.0	TT 25.694
## 682	40.0	16.7	Female	19	Caucasian	67.5	137.0	TT 21.138
## 683	80.0	16.7	Male	19	Asian	71.0	145.0	CC 20.221

## 684	54.5	7.1	Male	19	Caucasian	70.5	308.0	TT 43.564
## 685	100.0	16.7	Female	20	Caucasian	66.7	168.0	CC 26.547
## 686	38.5	27.3	Male	19	Caucasian	70.0	201.0	CT 28.837
## 687	60.0	20.0	Female	19	Caucasian	64.5	122.0	CT 20.616
## 688	100.0	0.0	Female	19	Caucasian	60.5	104.0	CT 19.975
## 689	60.0	0.0	Female	18	Caucasian	68.2	147.0	CT 22.218
## 694	25.0	0.0	Female	19	Asian	63.2	113.0	CC 19.888
## 695	25.0	-16.7	Female	31	Asian	64.0	141.0	CT 24.200
## 696	9.1	-8.3	Male	27	Asian	67.0	154.0	TT 24.117
## 699	30.8	0.0	Male	33	Caucasian	71.0	156.0	CT 21.755
## 700	0.0	-25.0	Male	23	Caucasian	67.5	120.0	CT 18.515
## 703	20.0	22.2	Female	37	Caucasian	71.0	244.0	CT 34.027
## 704	71.4	14.3	Female	19	Caucasian	64.0	115.0	CC 19.738
## 705	25.0	-25.0	Female	25	Asian	60.0	108.0	CC 21.090
## 706	0.0	-26.7	Male	24	Asian	68.0	140.0	CC 21.285
## 708	21.4	0.0	Male	22	Caucasian	69.7	174.0	TT 25.179
## 709	33.3	-8.3	Male	23	Caucasian	64.0	125.0	CC 21.454
## 710	37.5	0.0	Female	21	Caucasian	66.7	183.0	CC 28.917
## 711	50.0	0.0	Female	21	Caucasian	60.2	95.0	TT 18.428
## 712	50.0	8.3	Male	25	Caucasian	73.0	218.0	CC 28.758
## 717	13.3	-6.7	Male	25	Caucasian	70.5	170.0	TT 24.045
## 720	30.8	-7.7	Male	18	Caucasian	72.7	173.0	CC 23.011
## 721	45.5	16.7	Male	22	Caucasian	73.0	182.0	TT 24.009
## 722	66.7	20.0	Male	24	Caucasian	73.0	178.0	CT 23.482
## 723	50.0	33.3	Female	22	Caucasian	66.0	170.0	CT 27.436
## 724	53.8	7.1	Male	25	Caucasian	70.0	185.0	CC 26.542
## 725	20.0	0.0	Female	22	Caucasian	69.0	169.0	CT 24.954
## 726	80.0	75.0	Female	19	Caucasian	61.0	107.0	TT 20.215
## 727	100.0	25.0	Female	19	African Am	66.5	134.0	TT 21.302
## 728	45.5	-18.2	Male	20	Caucasian	67.0	150.0	CT 23.491
## 729	40.0	20.0	Male	29	Other	71.5	184.0	CC 25.302
## 730	22.2	0.0	Male	18	Hispanic	68.0	146.0	CT 22.197
## 731	40.0	20.0	Female	19	Caucasian	66.0	135.0	CT 21.787
## 732	25.0	0.0	Male	20	Caucasian	67.0	176.0	CT 27.562
## 733	66.7	0.0	Female	22	Caucasian	62.7	97.0	TT 17.346
## 734	35.7	0.0	Male	38	Caucasian	73.0	242.0	CT 31.925
## 735	20.0	0.0	Male	23	Caucasian	73.0	171.0	CT 22.558
## 736	15.4	0.0	Male	29	Caucasian	71.0	210.0	CT 29.286
## 737	100.0	25.0	Female	19	Caucasian	67.2	152.0	CT 23.662
## 738	40.0	0.0	Female	19	Caucasian	63.5	114.0	CT 19.875
## 739	36.4	-16.7	Male	19	Caucasian	77.0	220.0	CT 26.085
## 742	18.2	-7.7	Male	32	Caucasian	68.0	178.0	CT 27.062
## 743	27.3	0.0	Male	20	Asian	72.5	160.0	CT 21.399
## 744	66.7	0.0	Male	25	Caucasian	69.0	129.0	TT 19.048
## 745	44.4	-14.3	Male	21	Caucasian	69.5	148.0	TT 21.540
## 746	36.4	-26.7	Male	18	Caucasian	72.5	190.0	CC 25.412
## 747	50.0	10.0	Male	22	Hispanic	73.0	150.0	CT 19.788
## 749	42.9	0.0	Male	28	Asian	71.0	141.0	CC 19.663
## 856	54.3	11.1	Female	22	Caucasian	71.0	185.0	CT 25.799
## 857	57.1	25.0	Female	20	Caucasian	68.0	151.0	TT 22.957
## 858	120.0	16.7	Female	22	Caucasian	67.0	140.0	CT 21.925
## 859	166.7	100.0	Female	20	Caucasian	64.0	108.0	TT 18.536
## 860	40.0	8.3	Male	21	Caucasian	67.0	134.0	TT 20.985
## 862	20.0	0.0	Male	20	Caucasian	70.5	206.0	CC 29.137

## 864	80.0	20.0	Female	19	Caucasian	61.7	106.0	CT 19.575
## 867	100.0	50.0	Female	19	Caucasian	70.8	155.0	CT 21.738
## 868	42.9	0.0	Female	27	Caucasian	63.5	197.0	CT 34.346
## 869	42.9	14.3	Female	36	Caucasian	65.0	130.0	CT 21.631
## 870	42.9	0.0	Female	19	Caucasian	69.0	193.0	CC 28.498
## 871	28.6	14.3	Female	20	Caucasian	67.0	125.0	CT 19.576
## 873	100.0	0.0	Female	23	Caucasian	63.3	160.0	CC 28.072
## 874	8.3	8.3	Male	21	Caucasian	72.0	166.0	CT 22.511
## 876	60.0	30.0	Male	21	Caucasian	69.0	150.0	CT 22.149
## 878	125.0	16.7	Female	19	Caucasian	65.0	120.0	CC 19.967
## 879	40.0	16.7	Male	22	Caucasian	69.5	169.0	CC 24.596
## 880	75.0	10.0	Female	21	African Am	69.3	260.0	CT 38.059
## 881	30.8	7.7	Male	21	Caucasian	67.8	174.0	CT 26.610
## 882	35.7	-14.3	Male	21	Caucasian	69.7	153.0	CT 22.140
## 883	42.9	14.3	Female	20	Caucasian	63.0	117.0	CT 20.723
## 884	10.0	0.0	Male	21	Caucasian	69.0	180.0	CT 26.578
## 885	120.0	20.0	Female	19	Caucasian	64.5	133.0	CC 22.474
## 887	56.3	29.4	Male	24	Caucasian	69.0	183.0	CT 27.021
## 966	50.0	16.7	Female	39	Caucasian	64.7	192.0	CC 32.244
## 967	66.7	16.7	Female	18	Caucasian	66.7	147.0	CC 23.228
## 968	66.7	40.0	Female	22	Caucasian	64.7	131.0	CT 22.000
## 969	100.0	16.7	Female	18	Caucasian	61.7	141.0	CT 26.038
## 970	25.0	25.0	Female	22	Caucasian	66.2	175.0	CT 28.072
## 971	83.3	16.7	Female	21	Caucasian	67.0	163.0	CC 25.527
## 972	50.0	0.0	Female	19	Caucasian	68.0	170.0	CT 25.846
## 973	55.6	7.7	Male	19	Asian	68.0	160.0	TT 24.325
## 974	66.7	0.0	Female	23	Caucasian	62.7	130.0	CT 23.247
## 975	33.3	0.0	Female	19	Caucasian	65.7	129.0	CT 21.009
## 976	28.6	12.5	Female	19	Caucasian	62.0	135.0	CT 24.689
## 977	27.3	-9.1	Female	22	Caucasian	65.0	247.0	TT 41.098
## 978	66.7	12.5	Female	21	Caucasian	66.0	165.0	CC 26.629
## 979	22.2	0.0	Female	29	Caucasian	63.7	198.0	CT 34.304
## 980	37.5	12.5	Female	32	Caucasian	62.0	170.0	CC 31.090
## 982	120.0	50.0	Female	21	Caucasian	70.0	133.0	TT 19.081
## 983	23.1	14.3	Female	20	Caucasian	68.0	221.0	CT 33.599
## 984	28.6	28.6	Female	39	Caucasian	66.0	196.0	CT 31.632
## 985	50.0	0.0	Male	18	Caucasian	70.0	146.0	CT 20.947
## 987	30.0	22.2	Male	20	Caucasian	71.0	173.0	CT 24.126
## 988	60.0	-16.7	Female	21	Caucasian	63.5	119.0	CT 20.747
## 989	100.0	0.0	Female	19	Caucasian	63.0	118.0	CC 20.900
## 990	83.3	16.7	Female	21	Caucasian	70.0	165.0	TT 23.672
## 991	80.0	0.0	Female	23	Caucasian	64.0	140.0	CT 24.028
## 992	37.5	25.0	Male	26	Asian	66.0	116.0	CT 18.721
## 993	66.7	12.5	Male	21	Caucasian	72.0	152.0	TT 20.613
## 994	44.4	0.0	Male	22	Caucasian	73.0	139.0	CT 18.337
## 995	100.0	0.0	Female	21	Caucasian	64.5	100.0	CT 16.898
## 996	41.2	17.6	Male	22	Caucasian	69.0	171.0	CT 25.250
## 997	75.0	75.0	Female	21	Caucasian	67.0	127.0	CT 19.889
## 998	80.0	16.7	Female	19	Caucasian	65.0	126.0	CT 20.965
## 999	50.0	0.0	Female	19	Caucasian	64.0	130.0	CT 22.312
## 1000	75.0	20.0	Female	27	Caucasian	57.0	82.0	CC 17.743
## 1001	13.3	14.3	Male	39	Asian	62.0	111.0	CT 20.300
## 1002	57.1	28.6	Female	20	Caucasian	62.0	137.0	TT 25.055
## 1003	57.1	11.1	Male	22	Asian	67.0	161.0	CT 25.213

## 1004	50.0	0.0	Female	24	Caucasian	68.0	140.0	CC 21.285
## 1008	71.4	20.0	Male	24	Asian	74.0	145.0	CT 18.615
## 1009	83.3	0.0	Female	35	Caucasian	63.0	129.0	CC 22.849
## 1010	66.7	16.7	Female	19	Caucasian	63.0	125.0	CT 22.140
## 1011	50.0	14.3	Male	22	Asian	67.0	99.0	CT 15.504
## 1012	50.0	9.1	Male	27	Other	67.0	138.0	TT 21.611
## 1013	80.0	16.7	Female	21	Caucasian	65.0	131.0	CT 21.797
## 1014	100.0	0.0	Female	21	Caucasian	63.0	225.0	CC 39.853
## 1015	41.7	8.3	Male	26	Other	73.0	177.0	TT 23.350
## 1016	80.0	0.0	Female	21	Caucasian	69.0	160.0	TT 23.625
## 1017	50.0	33.3	Female	25	Caucasian	64.0	222.0	CT 38.102
## 1019	100.0	33.3	Female	19	Caucasian	67.0	132.0	CT 20.672
## 1021	60.0	20.0	Female	19	Caucasian	62.0	130.0	CC 23.775
## 1022	100.0	28.6	Female	21	Caucasian	64.0	121.0	TT 20.767
## 1023	66.7	100.0	Female	31	Asian	63.0	103.0	CC 18.244
## 1024	60.0	0.0	Female	20	Caucasian	65.0	135.0	CT 22.463
## 1025	40.0	8.3	Male	20	Caucasian	76.0	180.0	CC 21.908
## 1029	100.0	40.0	Female	20	Caucasian	66.0	191.0	TT 30.825
## 1030	100.0	40.0	Female	21	Caucasian	70.0	173.0	TT 24.820
## 1031	30.0	-10.0	Female	26	Asian	70.0	162.0	TT 23.242
## 1032	80.0	20.0	Female	21	Caucasian	65.9	189.0	CT 30.595
## 1033	27.3	7.7	Male	23	Hispanic	68.0	165.0	TT 25.085
## 1034	57.1	0.0	Female	21	Caucasian	67.0	175.0	TT 27.406
## 1036	50.0	20.0	Male	21	Caucasian	68.0	141.0	TT 21.437
## 1037	60.0	20.0	Female	21	Caucasian	62.0	110.0	TT 20.117
## 1038	116.0	28.6	Female	20	Caucasian	65.0	125.0	TT 20.799
## 1039	100.0	14.3	Female	19	Caucasian	64.0	133.0	TT 22.827
## 1040	150.0	100.0	Female	18	Caucasian	65.0	146.0	TT 24.293
## 1041	83.3	66.7	Female	32	Caucasian	65.0	210.0	TT 34.942
## 1042	28.6	28.6	Female	20	Caucasian	69.0	141.0	TT 20.820
## 1043	66.7	14.3	Female	23	Caucasian	63.0	109.0	TT 19.306
## 1044	83.3	14.3	Female	26	Caucasian	66.0	143.0	TT 23.078
## 1045	80.0	20.0	Female	18	Caucasian	66.0	137.0	CT 22.110
## 1046	100.0	20.0	Female	22	Caucasian	68.0	150.0	TT 22.805
## 1047	37.5	-22.2	Female	21	Caucasian	64.3	144.0	TT 24.485
## 1049	80.0	40.0	Female	21	Caucasian	65.0	130.0	CT 21.631
## 1050	233.3	40.0	Female	30	Caucasian	67.0	156.0	TT 24.430
## 1051	60.0	-8.3	Male	29	Caucasian	74.0	203.0	TT 26.061
## 1052	125.0	40.0	Female	19	Caucasian	65.0	124.0	TT 20.632
## 1054	100.0	-33.3	Female	21	Caucasian	63.0	139.0	TT 24.620
## 1055	20.0	33.3	Female	21	Caucasian	66.0	214.0	TT 34.537
## 1056	15.4	8.3	Female	19	Caucasian	70.0	158.0	TT 22.668
## 1058	100.0	0.0	Female	26	Caucasian	61.0	109.0	CT 20.593
## 1060	60.0	28.6	Female	24	Caucasian	67.0	174.0	CC 27.249
## 1061	40.0	0.0	Female	22	Caucasian	63.0	132.0	CT 23.380
## 1063	27.3	8.3	Male	19	Hispanic	70.5	226.0	CT 31.966
## 1065	50.0	0.0	Female	21	Caucasian	60.0	106.0	CT 20.699
## 1066	66.7	22.2	Female	21	Caucasian	65.0	151.0	CT 25.125
## 1068	20.0	16.7	Male	23	Caucasian	65.0	185.0	CT 30.782
## 1070	16.7	16.7	Female	19	Caucasian	67.0	162.0	CC 25.370
## 1072	33.3	16.7	Female	23	Caucasian	68.0	140.0	CC 21.285
## 1073	33.3	33.3	Female	20	African Am	68.0	127.0	CT 19.308
## 1079	14.3	12.5	Female	22	Caucasian	71.0	156.0	CC 21.755
## 1080	17.6	0.0	Male	19	African Am	69.0	159.0	CC 23.478

## 1081	6.7	-5.6	Male	25	Caucasian	66.0	192.0	CC 30.986
## 1082	27.3	27.3	Male	20	Caucasian	70.0	150.0	CT 21.520
## 1083	40.0	20.0	Female	20	Caucasian	64.0	113.0	CT 19.394
## 1084	0.0	-14.3	Female	20	Caucasian	65.0	148.0	CT 24.626
## 1085	42.9	0.0	Female	26	Caucasian	67.0	155.0	CT 24.274
## 1087	33.3	14.3	Female	38	Caucasian	63.5	125.0	CC 21.793
## 1088	0.0	14.3	Female	39	Caucasian	66.0	202.0	CC 32.600
## 1089	16.7	-12.5	Female	27	Caucasian	68.5	141.0	CT 21.125
## 1090	75.0	60.0	Female	18	Other	60.0	117.0	TT 22.848
## 1091	75.0	0.0	Female	36	Caucasian	64.0	154.0	CT 26.431
## 1092	20.0	-10.0	Male	36	Caucasian	69.0	157.0	CT 23.182
## 1093	0.0	0.0	Female	30	Caucasian	64.0	150.0	CT 25.745
## 1094	8.3	0.0	Male	37	Caucasian	65.0	156.0	TT 25.957
## 1095	0.0	-14.3	Female	26	Caucasian	66.7	151.0	CC 23.861
## 1097	33.3	14.3	Female	33	Caucasian	61.0	157.0	CC 29.662
## 1098	28.6	-11.1	Female	37	Caucasian	68.0	189.0	CT 28.734
## 1099	62.5	28.6	Female	36	Caucasian	68.0	196.0	CC 29.798
## 1100	57.1	11.1	Female	18	Caucasian	67.0	177.0	CT 27.719
## 1101	33.3	20.0	Female	31	Caucasian	64.0	132.0	TT 22.655
## 1102	120.0	60.0	Female	25	Caucasian	61.5	144.0	CT 26.765
## 1103	0.0	0.0	Female	20	Caucasian	64.0	123.0	CT 21.111
## 1104	18.2	44.4	Male	24	Caucasian	71.5	191.0	CT 26.265
## 1105	50.0	0.0	Female	25	Caucasian	66.5	118.0	CC 18.758
## 1106	25.0	5.9	Male	35	African Am	69.0	178.0	CC 26.283
## 1108	16.7	-5.9	Male	20	Caucasian	72.0	204.0	TT 27.664
## 1110	70.0	0.0	Male	36	Caucasian	69.0	162.0	CT 23.921
## 1111	40.0	20.0	Female	38	Caucasian	66.0	111.0	CC 17.914
## 1112	20.0	16.7	Female	25	Caucasian	68.5	182.0	CC 27.268
## 1113	14.3	0.0	Male	25	Caucasian	74.0	202.0	CC 25.932
## 1114	55.6	10.0	Male	21	Hispanic	68.0	151.0	CT 22.957
## 1115	30.8	15.4	Male	33	Caucasian	67.0	174.0	CT 27.249
## 1116	33.3	28.6	Female	37	Caucasian	67.5	153.0	CC 23.607
## 1117	42.9	0.0	Female	21	Caucasian	66.5	155.0	CT 24.640
## 1119	33.3	0.0	Female	25	Caucasian	64.0	165.0	CT 28.319
## 1121	38.5	7.1	Male	19	Caucasian	71.0	195.0	TT 27.194
## 1122	11.1	-11.1	Female	20	Caucasian	71.0	157.0	CC 21.895
## 1123	54.5	8.3	Male	20	Caucasian	69.5	157.0	CT 22.850
## 1127	100.0	20.0	Female	22	Caucasian	67.0	122.0	CT 19.106
## 1128	100.0	28.6	Female	34	Caucasian	67.3	142.0	TT 22.040
## 1129	60.0	40.0	Male	22	Caucasian	69.3	145.0	TT 21.225
## 1130	28.6	28.6	Female	25	Caucasian	63.0	146.0	TT 25.860
## 1131	25.0	16.7	Male	19	Caucasian	74.0	137.0	CC 17.588
## 1133	28.6	16.7	Female	34	Caucasian	64.5	147.0	TT 24.840
## 1134	33.3	7.7	Male	21	Caucasian	68.0	175.0	TT 26.606
## 1136	55.6	44.4	Female	23	Caucasian	67.5	167.0	TT 25.767
## 1137	71.4	0.0	Female	21	Caucasian	62.0	128.0	TT 23.409
## 1138	42.9	25.0	Female	21	Caucasian	69.0	143.0	TT 21.115
## 1139	100.0	60.0	Female	19	Caucasian	64.5	114.0	CT 19.264
## 1140	57.1	0.0	Female	33	Caucasian	65.5	168.0	TT 27.528
## 1141	75.0	44.4	Male	19	Caucasian	72.5	158.0	TT 21.132
## 1142	14.3	28.6	Female	19	African Am	64.5	221.0	CC 37.345
## 1143	50.0	33.3	Female	19	Caucasian	64.5	119.0	TT 20.109
## 1144	25.0	25.0	Male	20	Caucasian	66.0	262.0	TT 42.283
## 1145	60.0	0.0	Female	20	Caucasian	66.0	125.0	TT 20.173

## 1146	42.9	14.3	Female	19	Caucasian	61.5	135.0	CC 25.092
## 1147	50.0	0.0	Female	20	Caucasian	66.0	155.0	TT 25.015
## 1148	33.3	33.3	Female	22	Caucasian	64.0	105.0	TT 18.021
## 1150	40.0	27.3	Male	20	Caucasian	72.0	159.0	TT 21.562
## 1151	100.0	16.7	Female	20	Caucasian	66.5	148.0	TT 23.527
## 1154	36.4	-15.4	Male	29	Caucasian	70.5	171.0	CT 24.187
## 1155	23.1	7.1	Male	32	Other	67.5	151.0	CT 23.298
## 1156	46.2	21.4	Male	35	Other	67.5	204.0	CC 31.476
## 1157	36.4	25.0	Male	27	Caucasian	71.5	159.0	CT 21.865
## 1158	40.0	60.0	Female	31	Asian	62.0	110.0	CC 20.117
## 1159	16.7	16.7	Female	23	Caucasian	62.2	117.0	TT 21.260
## 1160	66.7	21.7	Female	24	Caucasian	65.5	130.0	CC 21.302
## 1161	36.4	25.0	Male	19	Caucasian	68.0	147.0	CT 22.349
## 1162	42.9	14.3	Female	21	Caucasian	62.0	112.0	CC 20.483
## 1163	50.0	0.0	Male	24	Caucasian	67.0	164.0	CT 25.683
## 1165	50.0	10.0	Male	19	Caucasian	70.0	156.0	CT 22.381
## 1167	28.6	7.1	Male	33	Caucasian	71.0	210.0	CC 29.286
## 1169	66.7	25.0	Female	22	Asian	62.0	129.0	TT 23.592
## 1170	46.0	16.7	Female	19	Asian	63.0	137.0	CC 24.266
## 1171	50.0	25.0	Female	19	Asian	62.0	145.0	TT 26.518
## 1172	62.5	30.0	Male	29	Asian	64.0	134.0	TT 22.999
## 1175	30.0	-8.3	Female	28	Caucasian	65.0	155.0	CC 25.791
## 1261	33.3	28.6	Female	31	Caucasian	68.0	136.0	CT 20.676
## 1262	50.0	14.3	Female	37	Asian	64.0	125.0	TT 21.454
## 1263	120.0	60.0	Female	35	Caucasian	66.0	124.0	TT 20.012
## 1264	42.9	12.5	Female	27	Caucasian	66.0	146.0	CC 23.562
## 1265	83.3	100.0	Female	22	Caucasian	66.0	134.0	CC 21.626
## 1266	50.0	28.6	Female	31	Caucasian	62.0	122.0	CC 22.312
## 1267	66.7	50.0	Female	22	Caucasian	62.0	118.0	CT 21.580
## 1268	116.7	33.3	Female	37	Caucasian	68.0	152.0	CT 23.109
## 1269	35.7	12.5	Male	27	Caucasian	75.0	196.0	CC 24.496
## 1270	80.0	14.3	Female	20	Caucasian	60.0	90.0	CT 17.575
## 1271	35.7	14.3	Male	19	Caucasian	70.0	135.0	CC 19.368
## 1272	66.7	0.0	Female	22	Caucasian	69.0	136.0	CT 20.081
## 1273	43.8	12.5	Male	24	Caucasian	73.0	212.0	CC 27.967
## 1274	37.5	12.5	Female	20	Caucasian	63.5	140.0	TT 24.408
## 1276	25.0	0.0	Female	23	Caucasian	66.0	133.0	CC 21.464
## 1277	71.4	71.4	Female	19	Caucasian	66.0	150.0	TT 24.208
## 1278	100.0	42.9	Female	29	Caucasian	60.0	123.0	TT 24.019
## 1280	25.0	12.5	Female	20	Caucasian	68.0	124.0	TT 18.852
## 1282	33.3	-11.1	Male	38	Caucasian	70.0	172.0	CT 24.677
## 1283	36.4	18.2	Female	24	Caucasian	66.0	124.0	TT 20.012
## 1284	37.5	28.6	Female	23	Caucasian	64.0	136.0	CC 23.342
## 1285	57.1	0.0	Female	20	Caucasian	60.0	129.0	CC 25.191
## 1288	57.1	11.1	Female	24	Caucasian	65.0	124.0	TT 20.632
## 1289	50.0	0.0	Female	22	Caucasian	65.5	130.0	CT 21.302
## 1290	15.4	0.0	Male	39	Caucasian	74.4	200.0	CT 25.400
## 1291	37.5	0.0	Female	21	Caucasian	64.0	112.0	CT 19.223
## 1292	7.7	7.7	Male	39	Caucasian	70.0	210.0	TT 30.129
## 1293	40.0	25.0	Male	21	Caucasian	65.0	133.0	CT 22.130
## 1295	30.0	9.1	Male	22	Caucasian	73.0	175.0	CT 23.086
## 1296	33.3	0.0	Female	30	Caucasian	63.0	126.0	CC 22.317
## 1297	50.0	-14.3	Female	26	Caucasian	63.0	118.0	CT 20.900
## 1298	6.7	-17.6	Male	22	Caucasian	74.0	201.0	TT 25.804

## 1300	16.7	-14.3	Female	38	African Am	62.0	133.0	CC	24.323
## 1301	33.3	-16.7	Female	25	Caucasian	65.0	147.0	TT	24.459
## 1305	80.0	0.0	Female	20	Caucasian	65.0	132.0	CT	21.964
## 1306	125.0	0.0	Female	20	Caucasian	65.0	132.0	CT	21.964
## 1307	42.9	12.5	Female	20	Caucasian	65.5	169.0	CT	27.692
## 1312	75.0	0.0	Female	22	Caucasian	62.0	100.0	CT	18.288
## 1313	50.0	14.3	Female	26	Asian	65.0	145.0	TT	24.127
## 1314	50.0	16.7	Male	24	Caucasian	72.0	214.0	TT	29.020
## 1316	28.6	0.0	Male	22	Caucasian	68.0	109.0	TT	16.572
## 1317	50.0	14.3	Male	22	Caucasian	67.0	122.0	CT	19.106
## 1320	75.0	0.0	Female	32	Caucasian	65.0	116.0	CC	19.301
## 1321	54.5	-7.7	Male	33	Caucasian	69.0	158.0	TT	23.330
## 1322	22.2	9.1	Male	30	Caucasian	73.0	214.0	CT	28.231
## 1323	36.4	9.1	Male	24	Caucasian	70.0	186.0	CT	26.685
## 1324	100.0	0.0	Female	26	Caucasian	66.0	168.0	CT	27.113
## 1325	43.8	7.1	Female	33	Caucasian	62.0	179.0	CC	32.736
## 1326	12.5	-9.1	Male	33	Caucasian	70.0	166.0	CC	23.816
## 1327	27.3	0.0	Male	28	Caucasian	71.0	295.0	TT	41.140
## 1328	71.4	-22.2	Male	27	Caucasian	71.0	148.0	CC	20.640
## 1329	62.5	25.0	Female	24	Caucasian	64.0	118.0	TT	20.252
## 1332	53.8	11.1	Female	31	Caucasian	62.0	131.0	CC	23.958
## 1333	50.0	0.0	Female	40	Caucasian	64.0	227.0	CT	38.960
## 1334	75.0	-22.7	Male	26	Caucasian	75.0	221.0	CC	27.620
## 1336	100.0	0.0	Female	20	Caucasian	62.0	149.0	CT	27.249
## 1337	100.0	7.7	Female	22	Caucasian	62.0	147.0	CT	26.884
## 1338	41.2	11.1	Male	29	Asian	68.0	187.0	CC	28.430
## 1339	36.4	0.0	Male	39	Caucasian	72.0	273.0	CT	37.021
## 1340	70.0	0.0	Female	19	Caucasian	61.0	110.0	TT	20.782
## 1341	16.7	3.6	Male	19	Caucasian	72.0	160.0	CT	21.698
## 1342	33.3	12.9	Male	20	Caucasian	74.0	184.0	CC	23.622
## 1343	52.9	12.5	Male	24	Asian	67.0	157.0	CC	24.587
## 1344	62.5	28.6	Male	24	Asian	71.5	163.0	CC	22.415
## 1345	87.5	12.5	Female	22	Caucasian	65.5	136.0	CT	22.285
## 1346	100.0	12.5	Female	21	Asian	59.0	99.5	CT	20.094
## 1347	43.8	14.3	Female	31	Caucasian	64.0	134.0	CT	22.999
## 1348	43.8	14.3	Female	30	Caucasian	64.0	134.0	CC	22.999

```
t.test(famuss$age, conf.level=0.95)$estimate
```

```
## mean of x
## 24.40168
```

```
t.test(famuss$age, conf.level=0.95)$conf.int
```

```
## [1] 23.93359 24.86977
## attr(,"conf.level")
## [1] 0.95
```

b.) null hypothesis: mean of age is not over 24 alternative : the mean of age is over 24

```
t.test(famuss$age, mu = 24, alternative = "greater")
```

```
##
## One Sample t-test
##
## data: famuss$age
## t = 1.6853, df = 594, p-value = 0.04623
```

```
## alternative hypothesis: true mean is greater than 24
## 95 percent confidence interval:
## 24.00903      Inf
## sample estimates:
## mean of x
## 24.40168
```

```
t.test(famuss$drm.ch, alternative = "greater")
```

```
##
## One Sample t-test
##
## data: famuss$drm.ch
## t = 13.995, df = 594, p-value < 2.2e-16
## alternative hypothesis: true mean is greater than 0
## 95 percent confidence interval:
## 9.131896      Inf
## sample estimates:
## mean of x
## 10.35025
```

```
t.test(famuss$ndrm.ch, alternative = "greater")
```

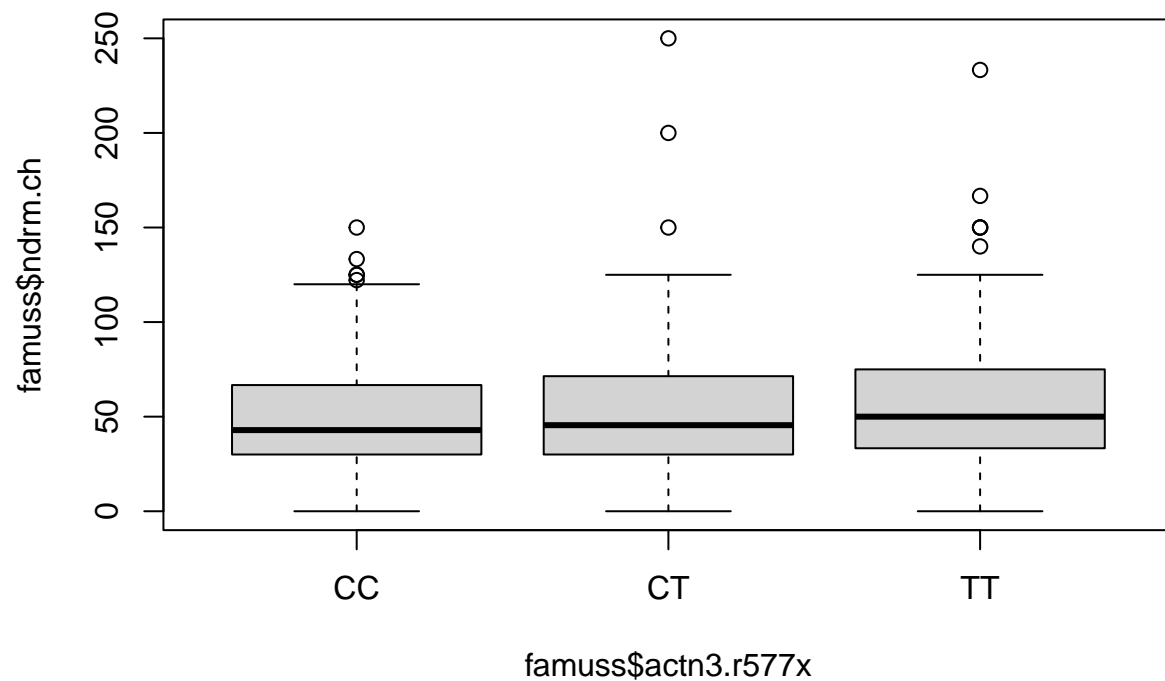
```
##
## One Sample t-test
##
## data: famuss$ndrm.ch
## t = 39.226, df = 594, p-value < 2.2e-16
## alternative hypothesis: true mean is greater than 0
## 95 percent confidence interval:
## 51.05294      Inf
## sample estimates:
## mean of x
## 53.29109
```

```
#c.)null hypothesis:drm.ch is not less than ndrm.ch
#alternative hypothesis: drm.ch is less than ndrm.ch
```

```
pairwise.t.test(famuss$bmi, famuss$actn3.r577x, p.adj = "none")
```

```
##
## Pairwise comparisons using t tests with pooled SD
##
## data: famuss$bmi and famuss$actn3.r577x
##
## CC CT
## CT 0.96 -
## TT 0.51 0.51
##
## P value adjustment method: none
```

```
plot(famuss$ndrm.ch ~ famuss$actn3.r577x)
```



```
summary(aov(famuss$ndrm.ch ~ famuss$actn3.r577x))
```

```
##               Df Sum Sq Mean Sq F value Pr(>F)
## famuss$actn3.r577x  2   7043    3522   3.231 0.0402 *
## Residuals        592 645293    1090
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

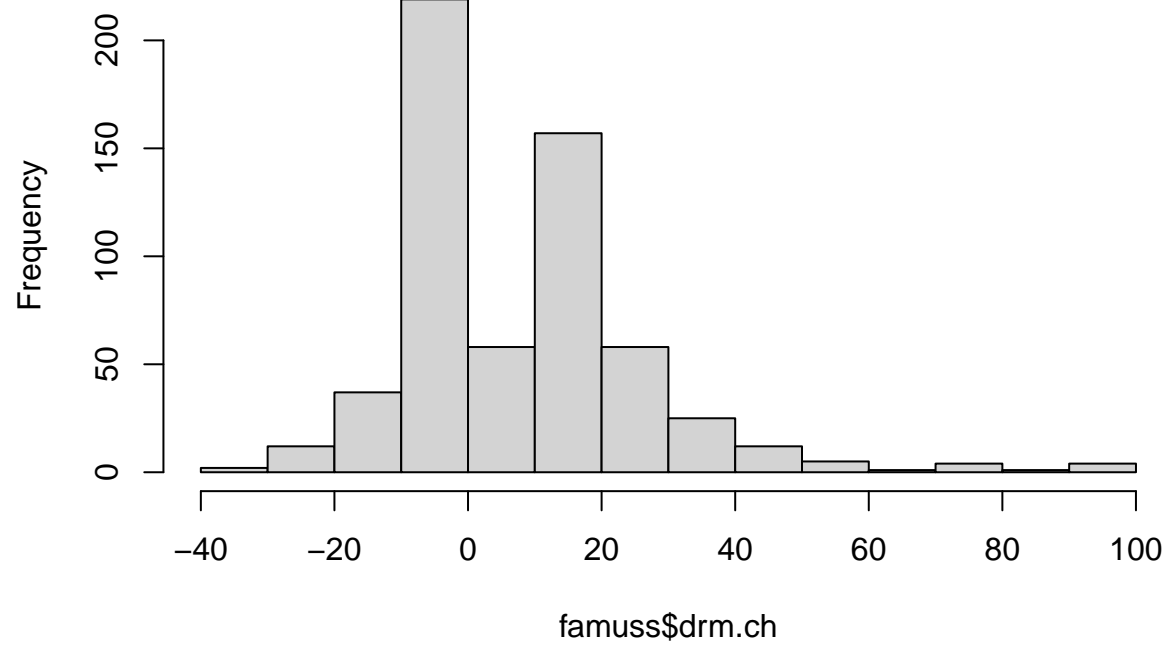
```
tapply(famuss$ndrm.ch, famuss$actn3.r577x, var)
```

```
##          CC          CT          TT
## 897.3667 1104.3311 1273.8712
```

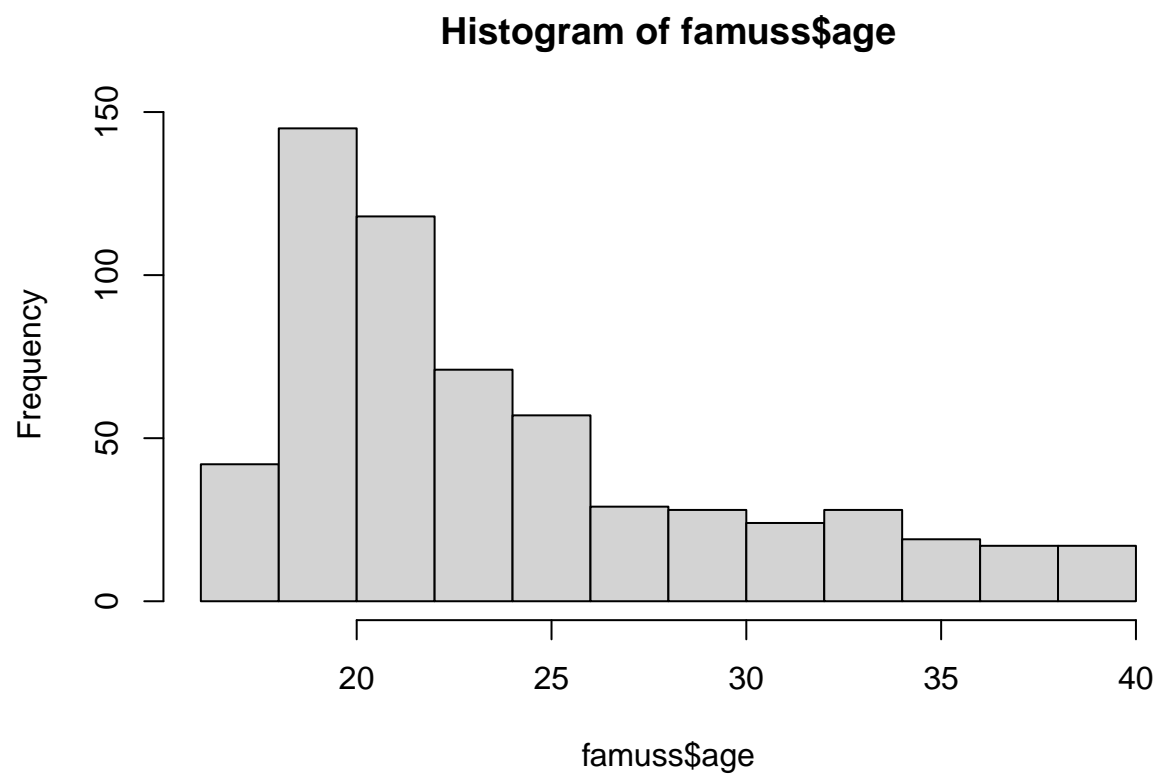
```
hist(famuss$drm.ch)
```

```
hist(famuss$drm.ch)
```

Histogram of famuss\$drm.ch

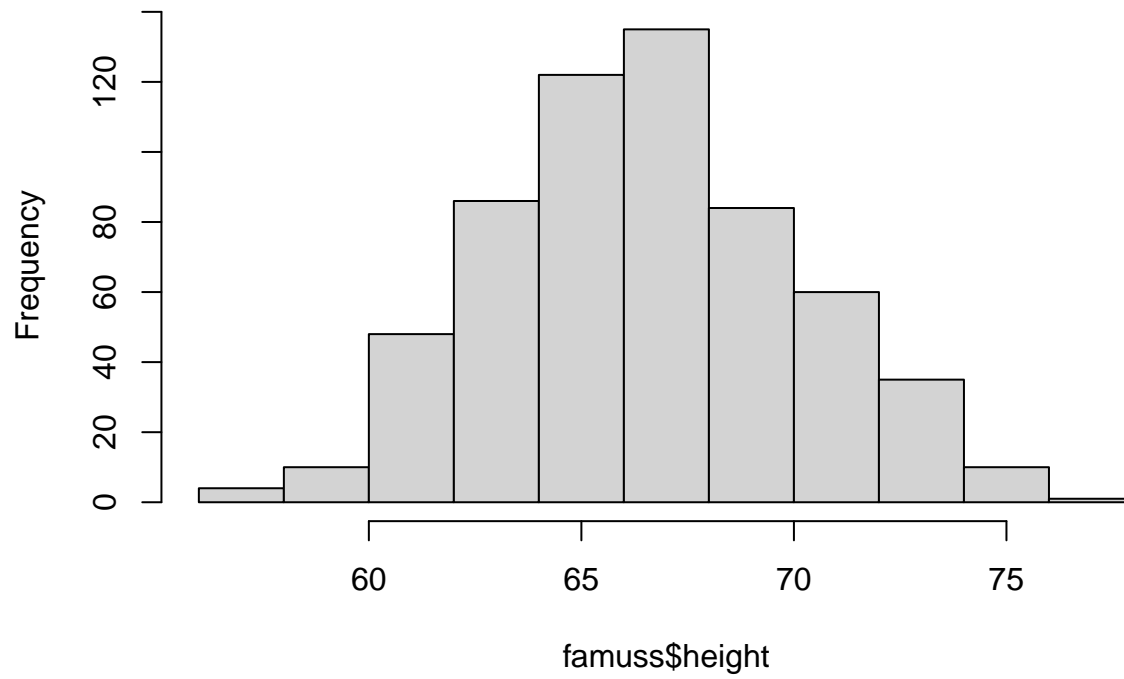


```
hist(famuss$age)
```

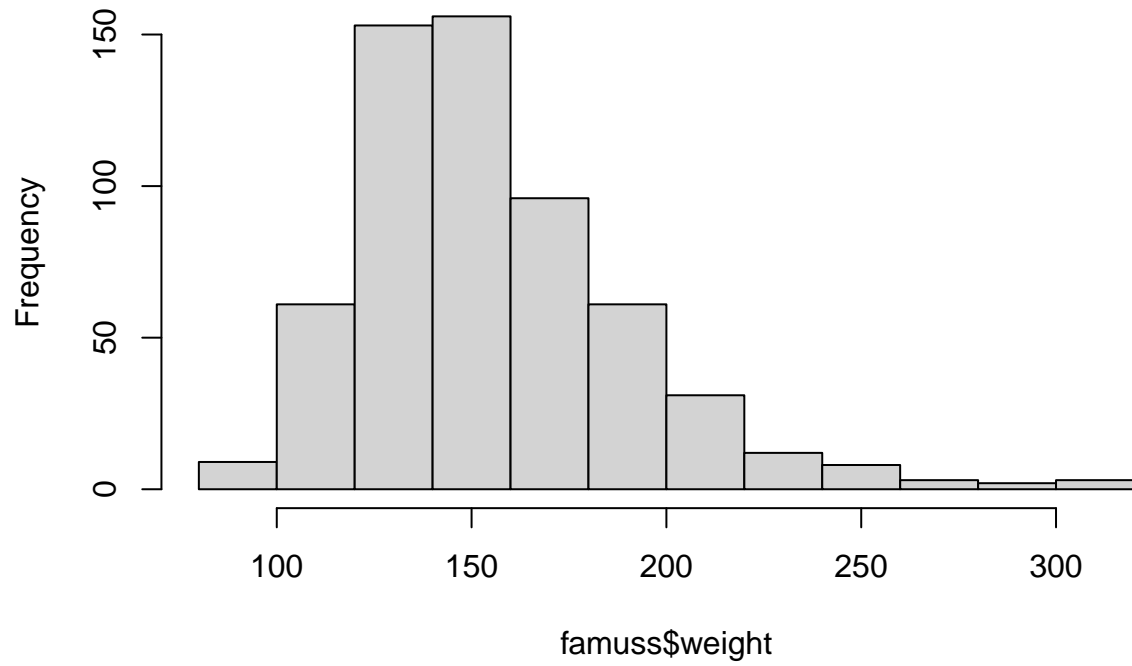
```
hist(famuss$height)
```

Histogram of famuss\$height



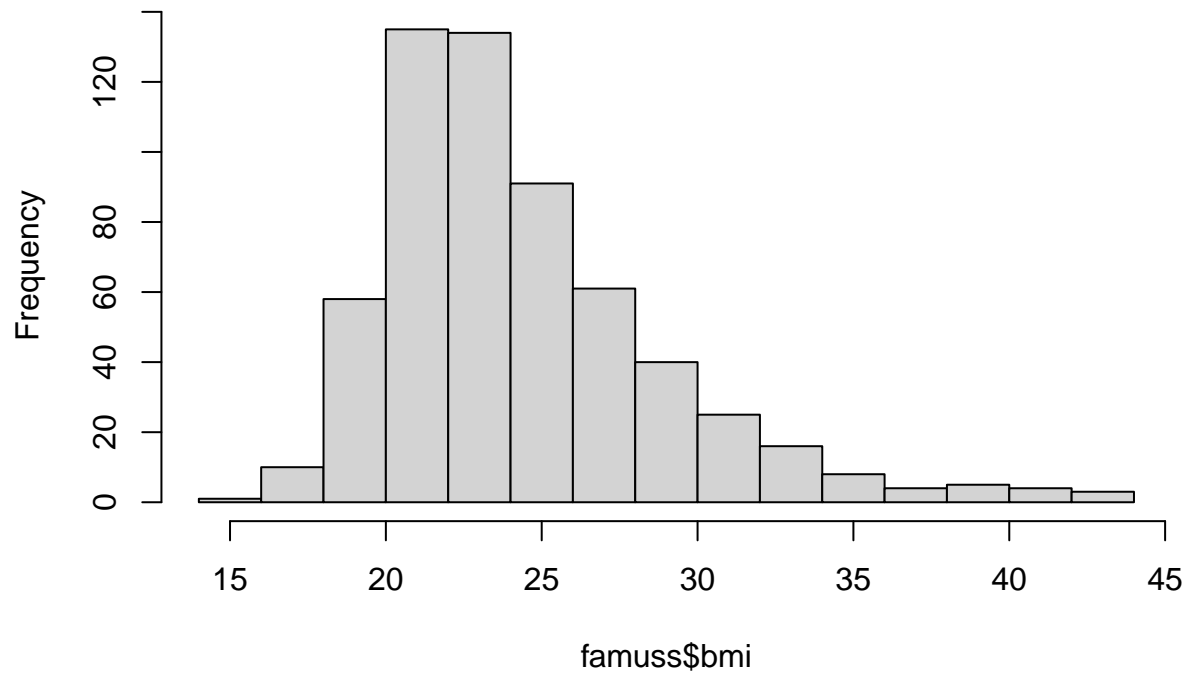
```
hist(famuss$weight)
```

Histogram of famuss\$weight

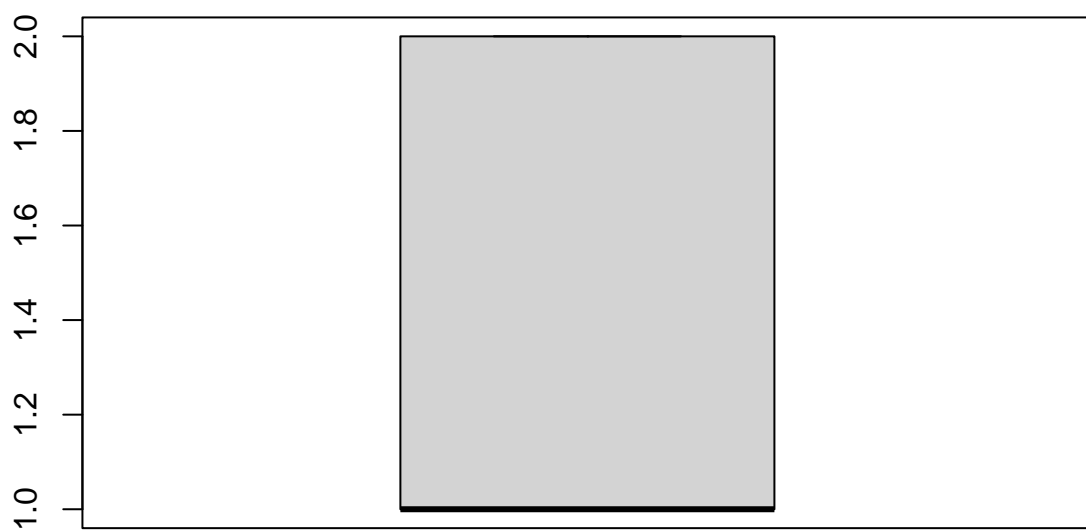


```
hist(famuss$bmi)
```

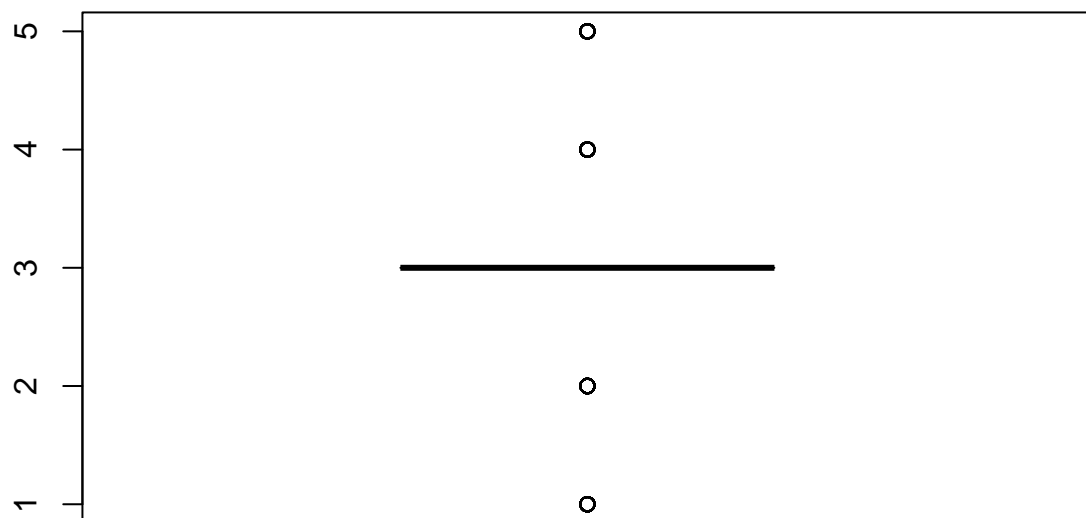
Histogram of famuss\$bmi



```
boxplot(famuss$sex)
```



```
boxplot(famuss$race)
```



```
boxplot(famuss$actn3.r577x)
```

