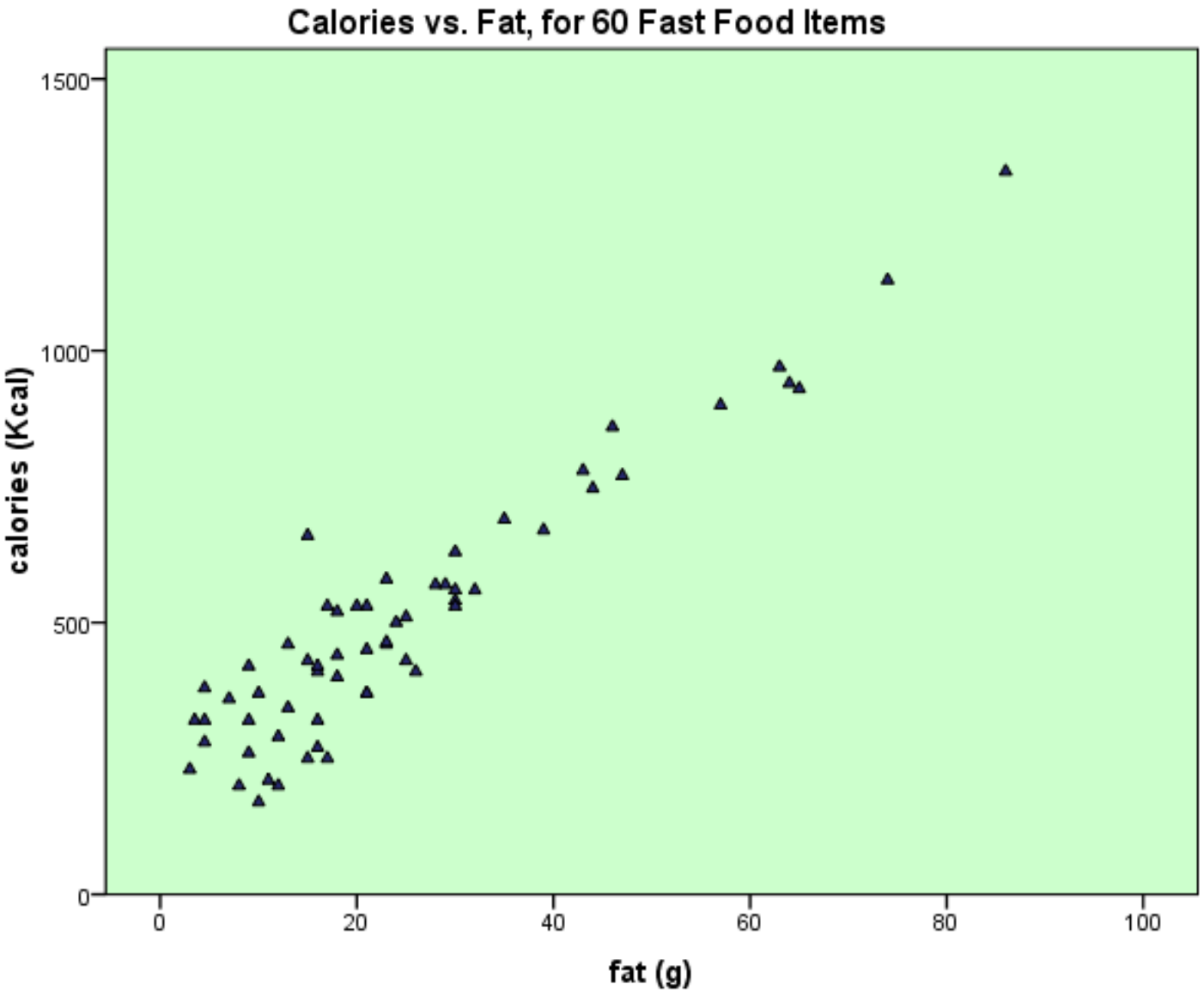
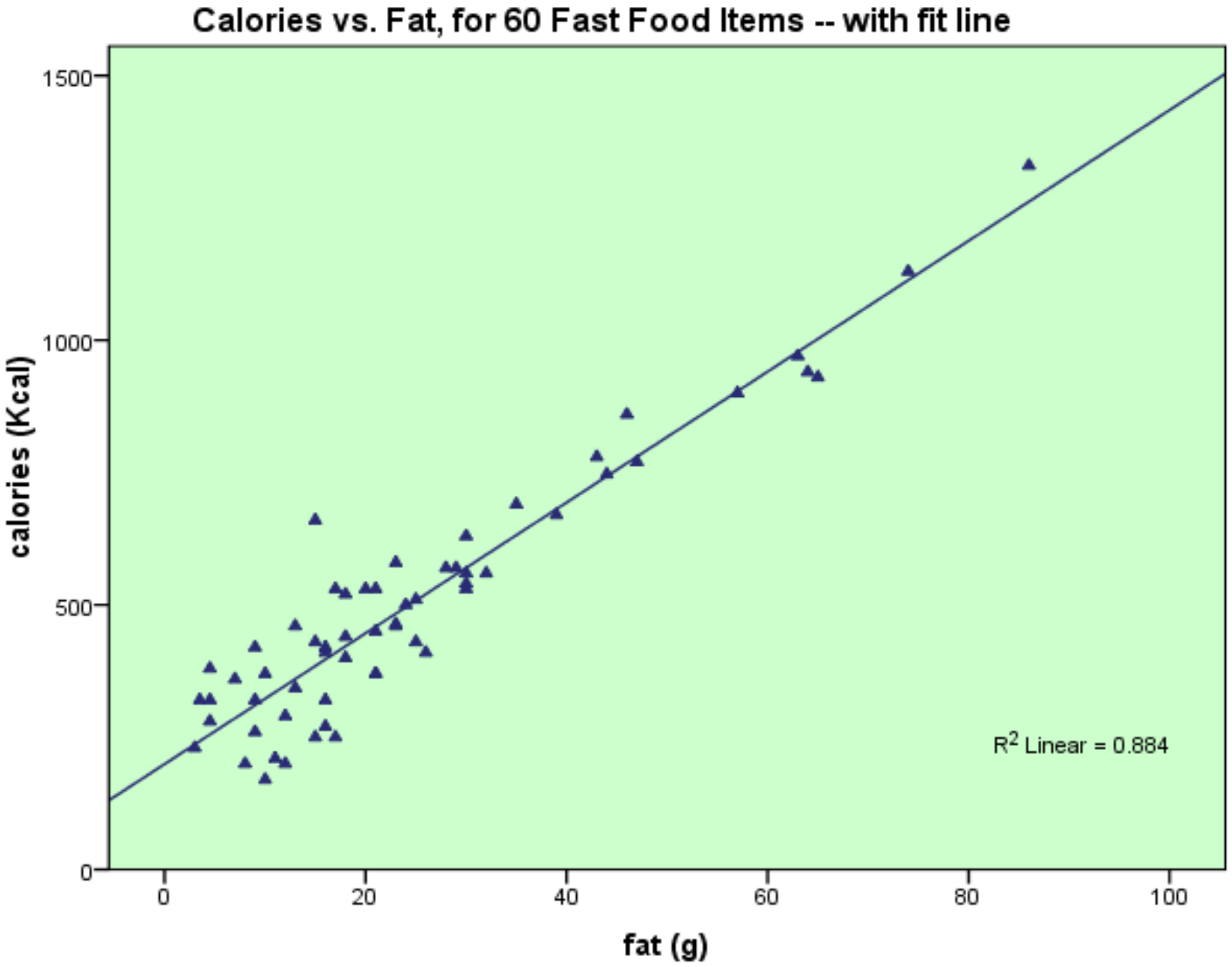
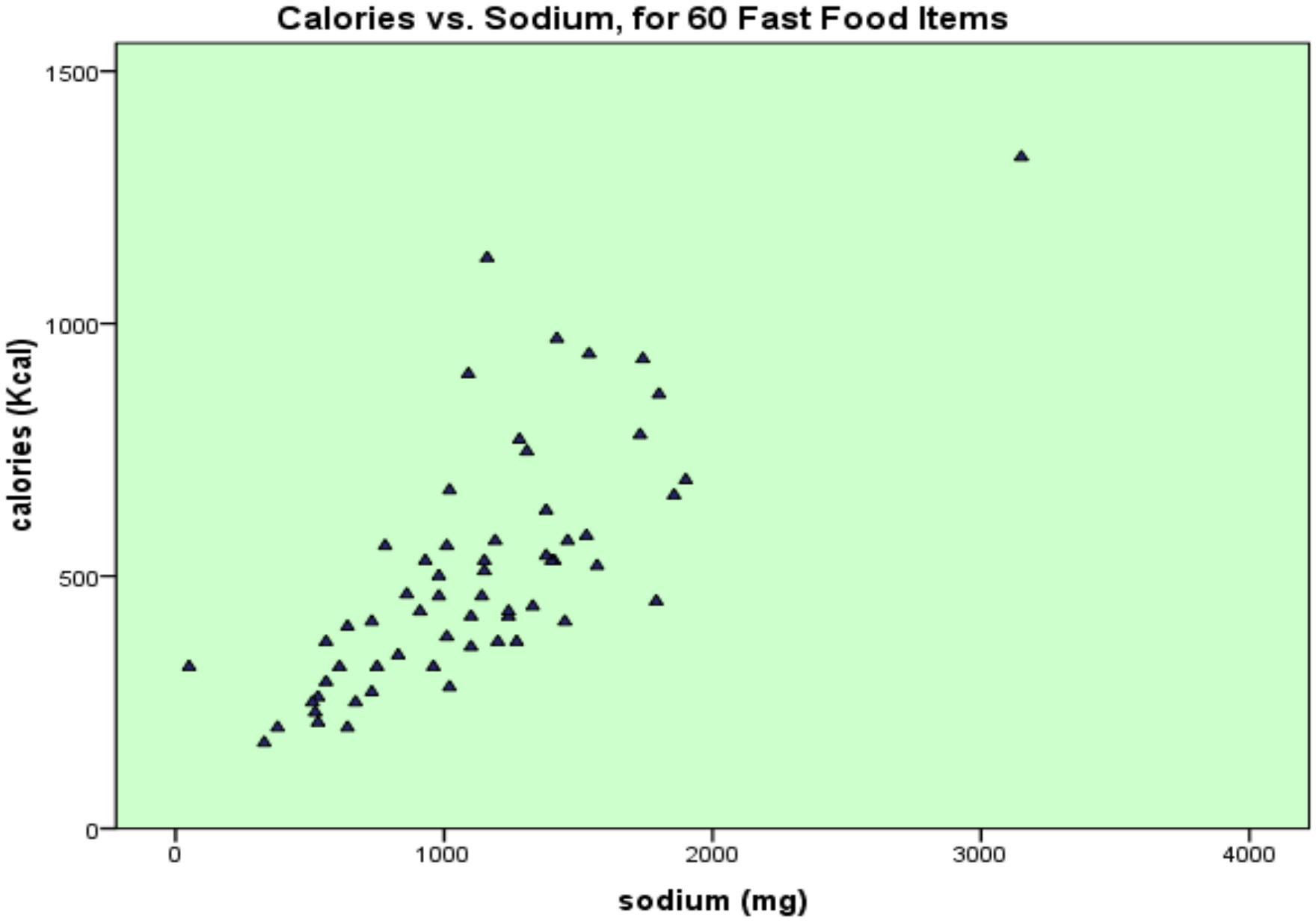
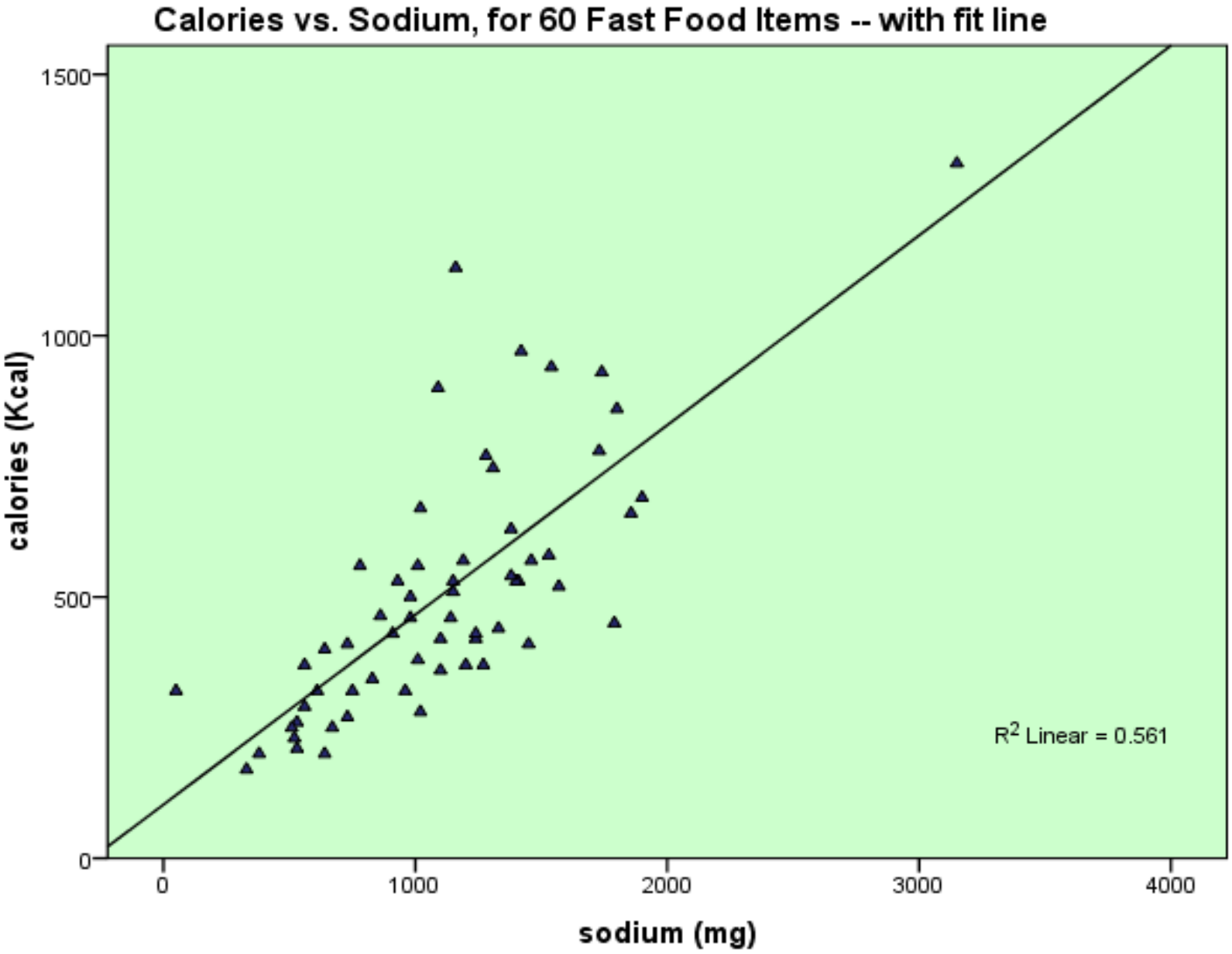

Calories vs. Fat, for 60 Fast Food Items
calories (Kcal)
1500
1000
500
0
0
20
40
60
80
100
fat (g)

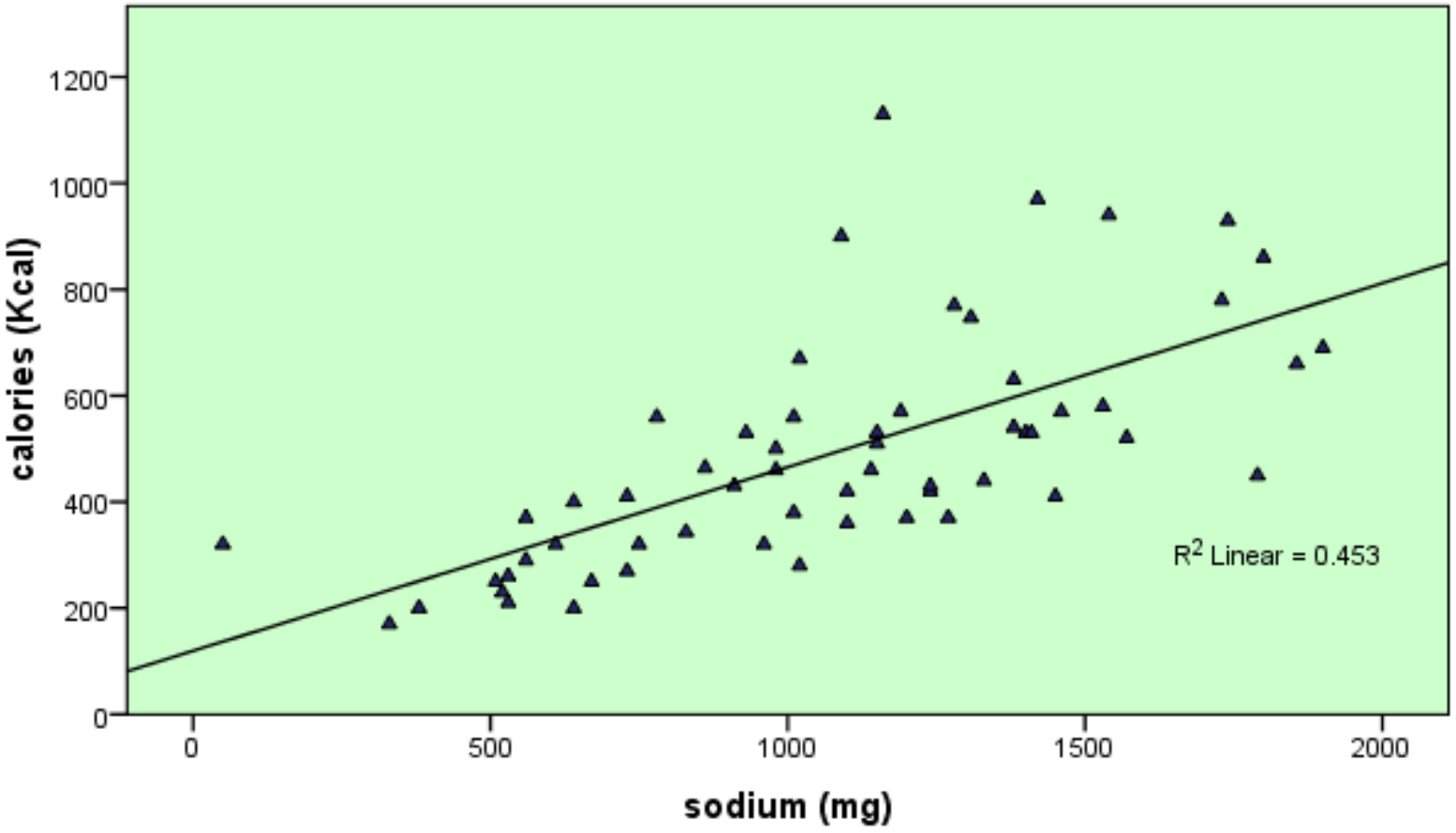

Calories vs. Fat, for 60 Fast Food Items -- with fit line
calories (Kcal)
1500
1000
500
0
0
20
40
60
80
100
fat (g)
R2 Linear = 0.884

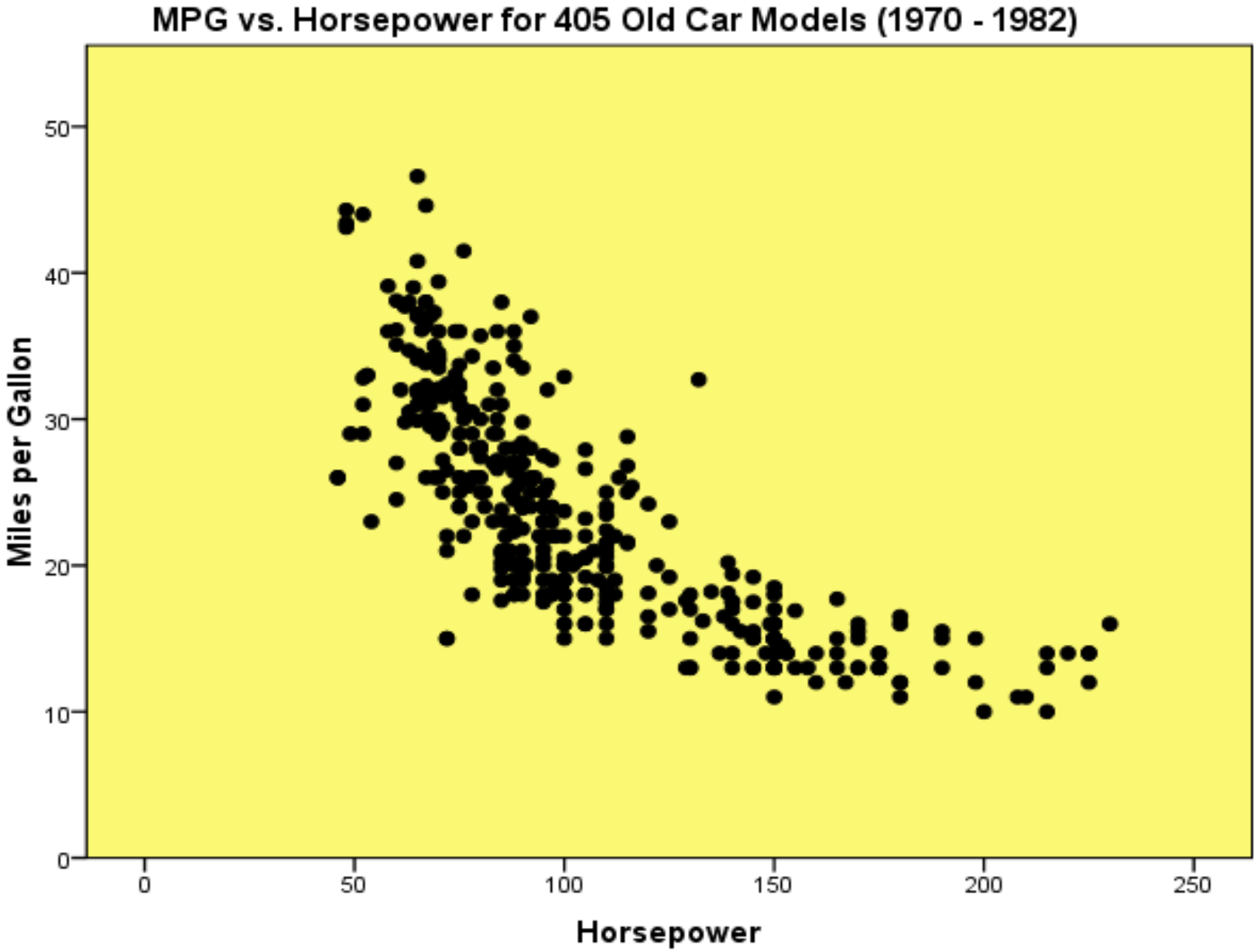

Calories vs. Sodium, for 60 Fast Food Items
calories (Kcal)
1500
1000
500
0
0
1000
2000
3000
4000
sodium (mg)

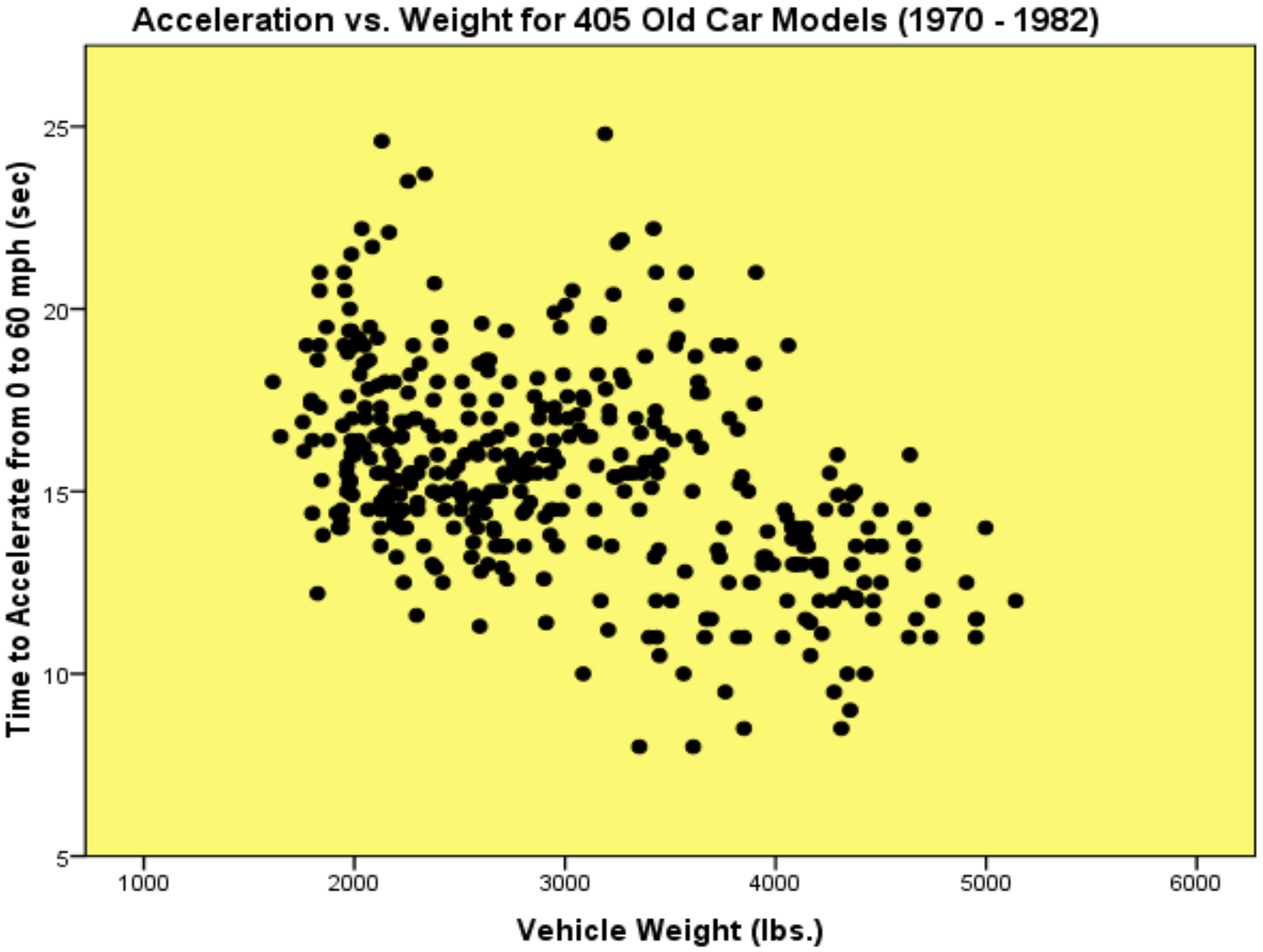

Calories vs. Sodium, for 60 Fast Food Items -- with fit line
calories (Kcal)
1500
1000
500
0
0
1000
2000
3000
4000
sodium (mg)
R2 Linear = 0.561

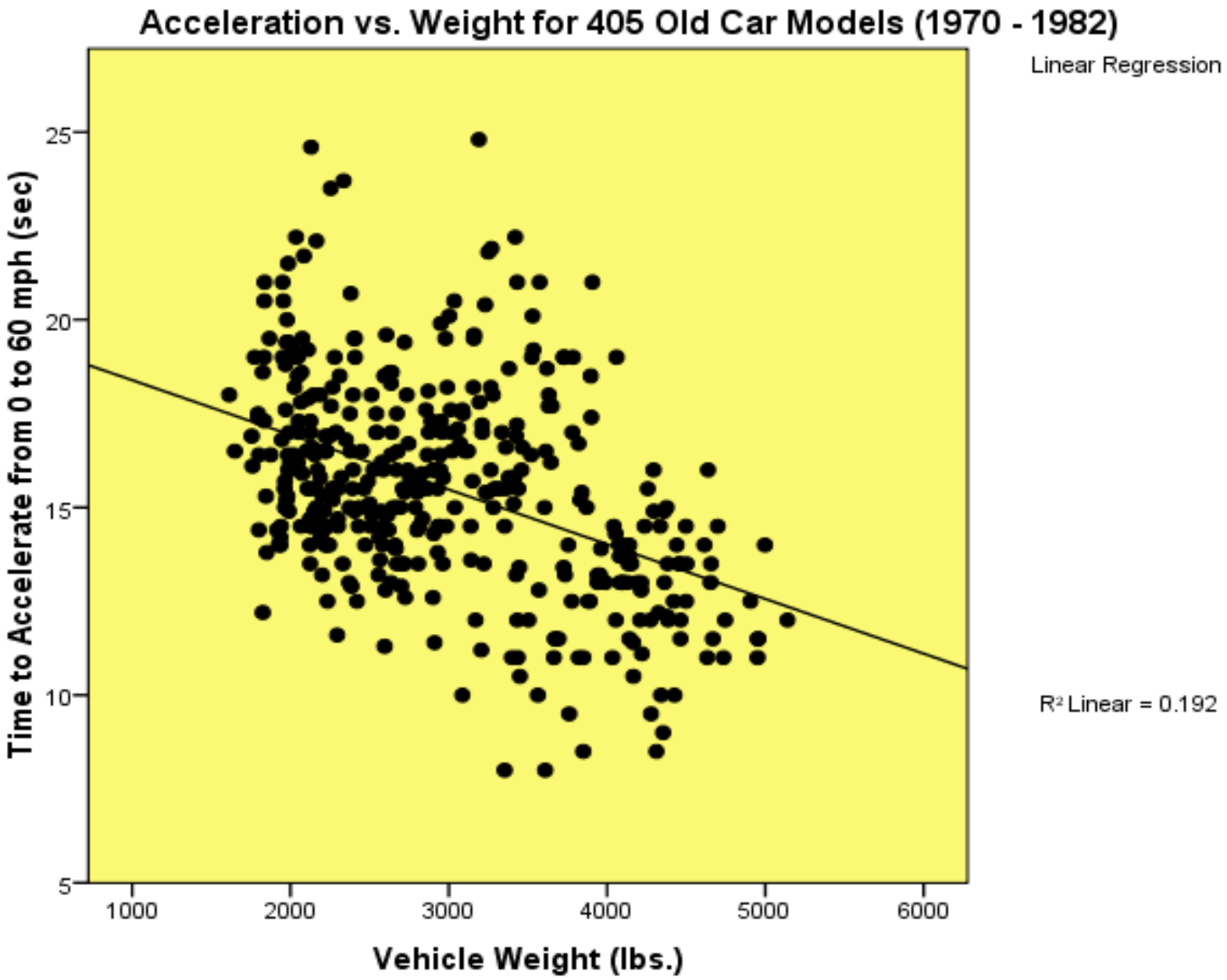
Calories vs. Sodium, for 59 Fast Food Items -- with fit line

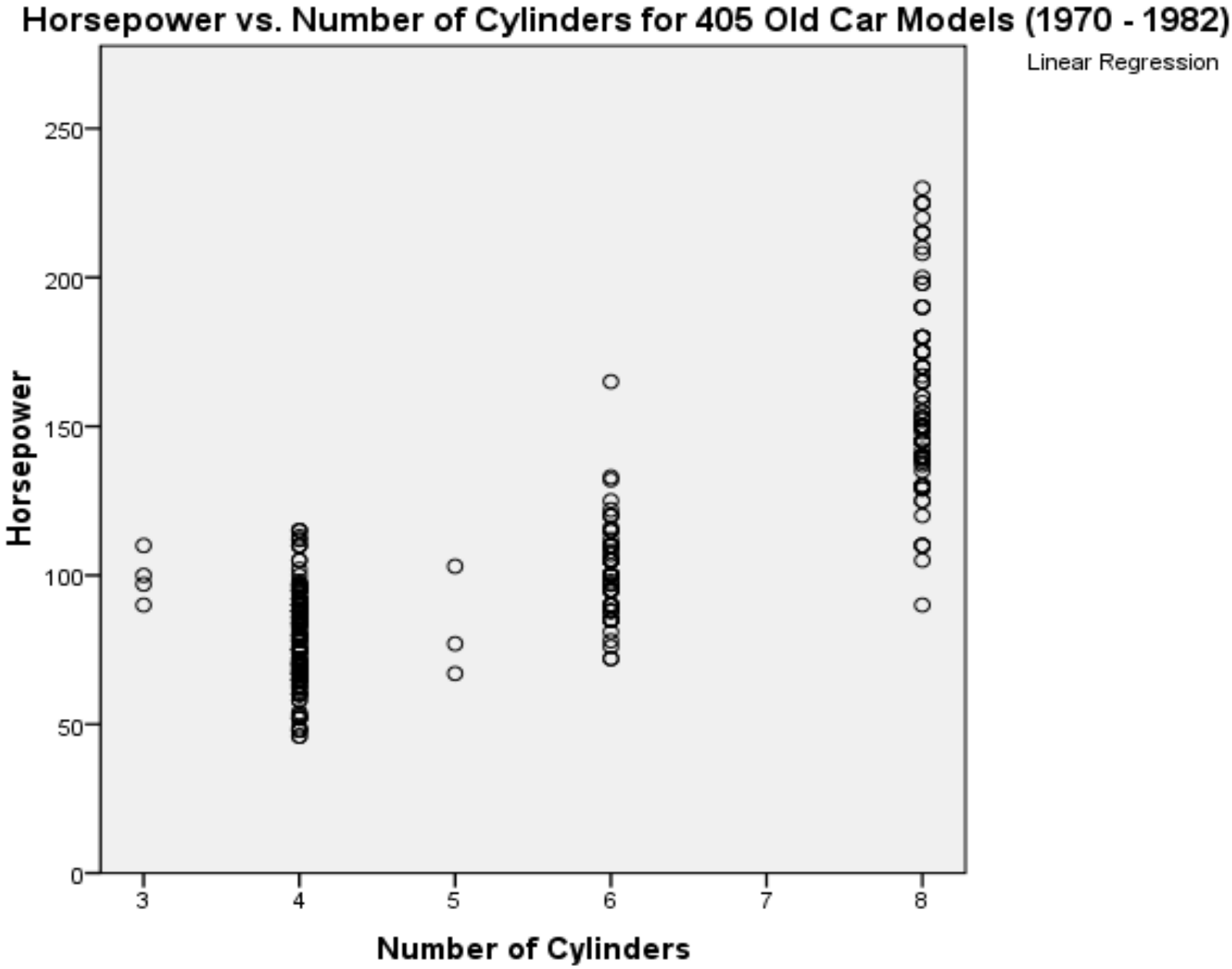
Triple Baconator was excluded

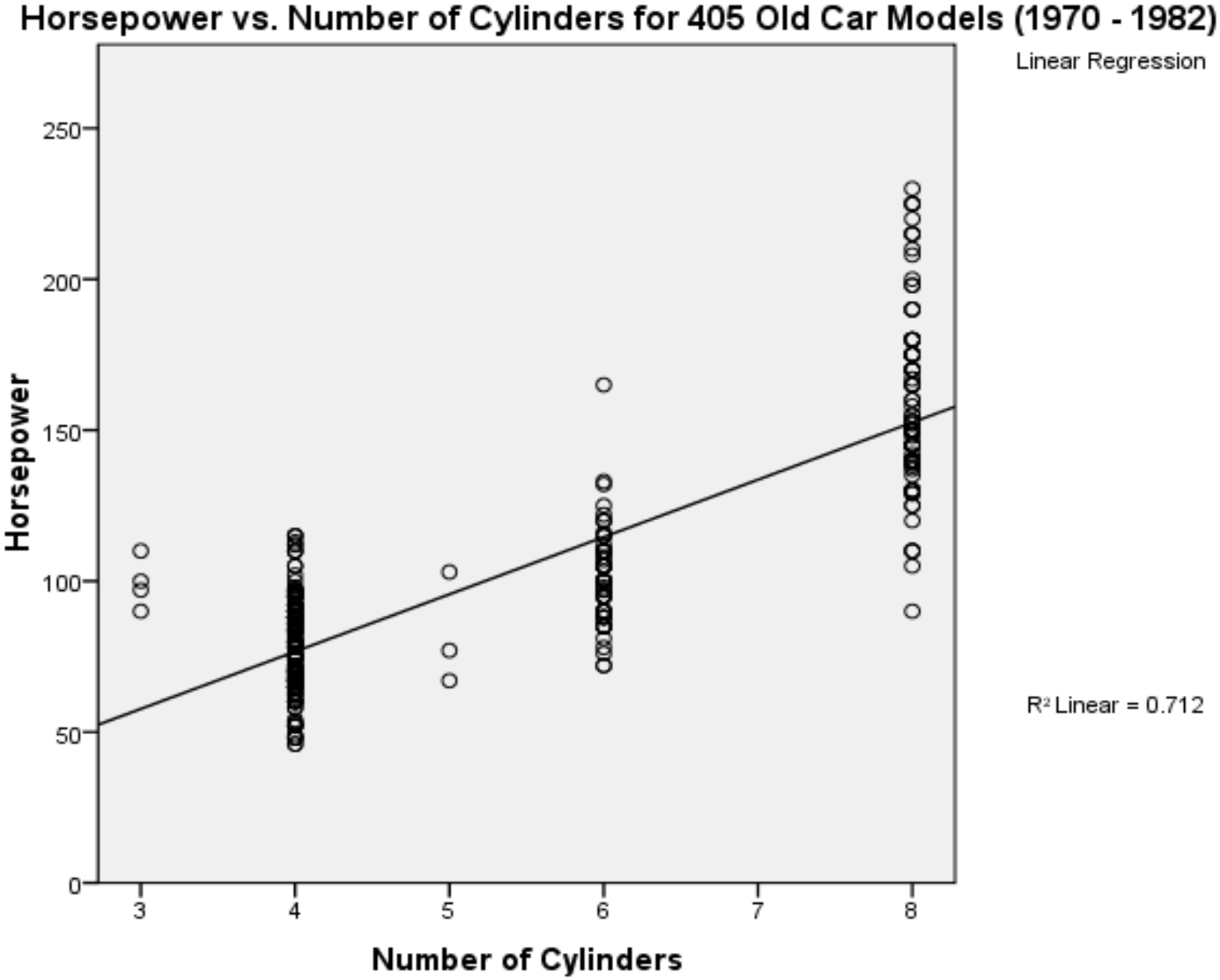


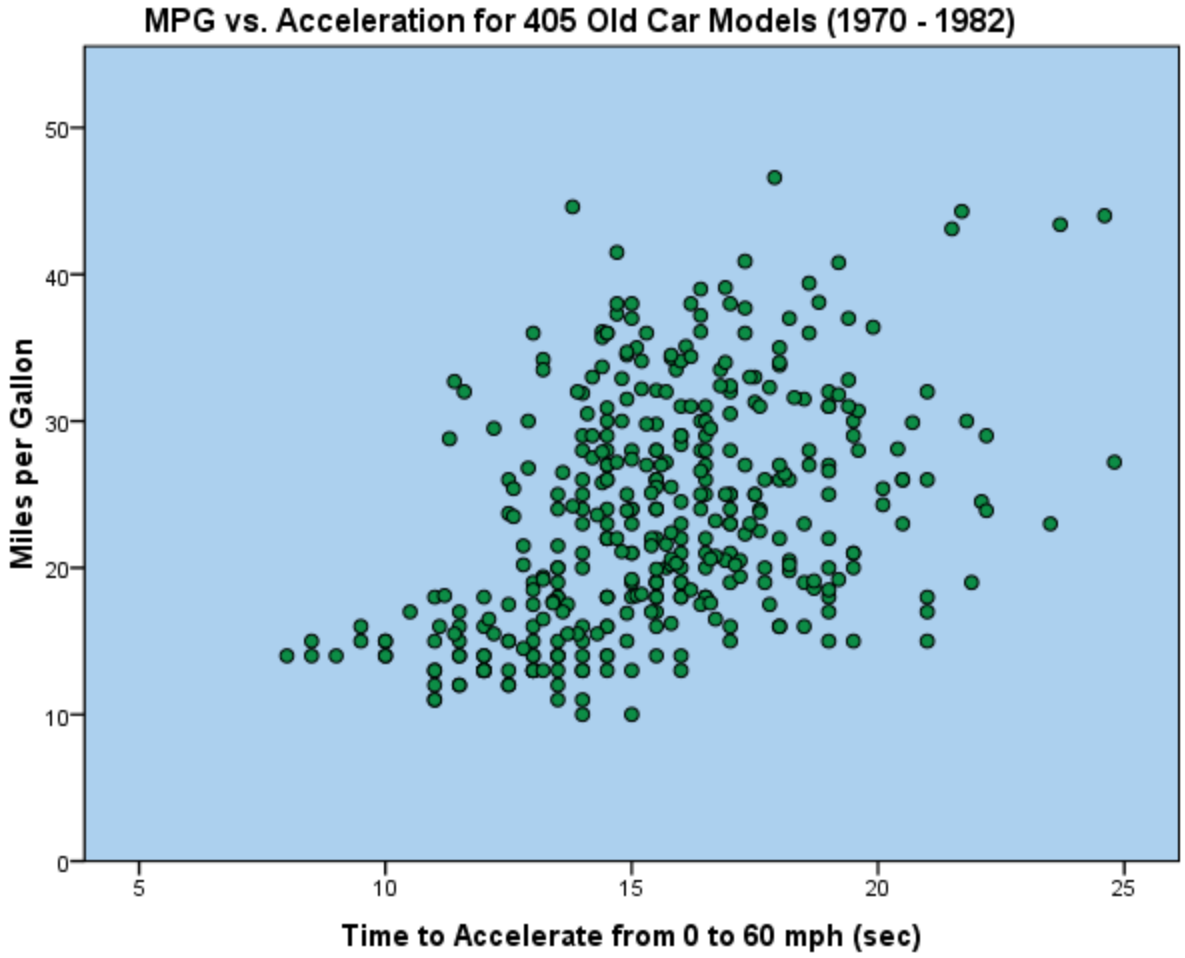

MPG vs. Horsepower for 405 Old Car Models (1970 - 1982)
Miles per Gallon
0
10
20
30
40
50
Horsepower
0
50
100
150
200
250

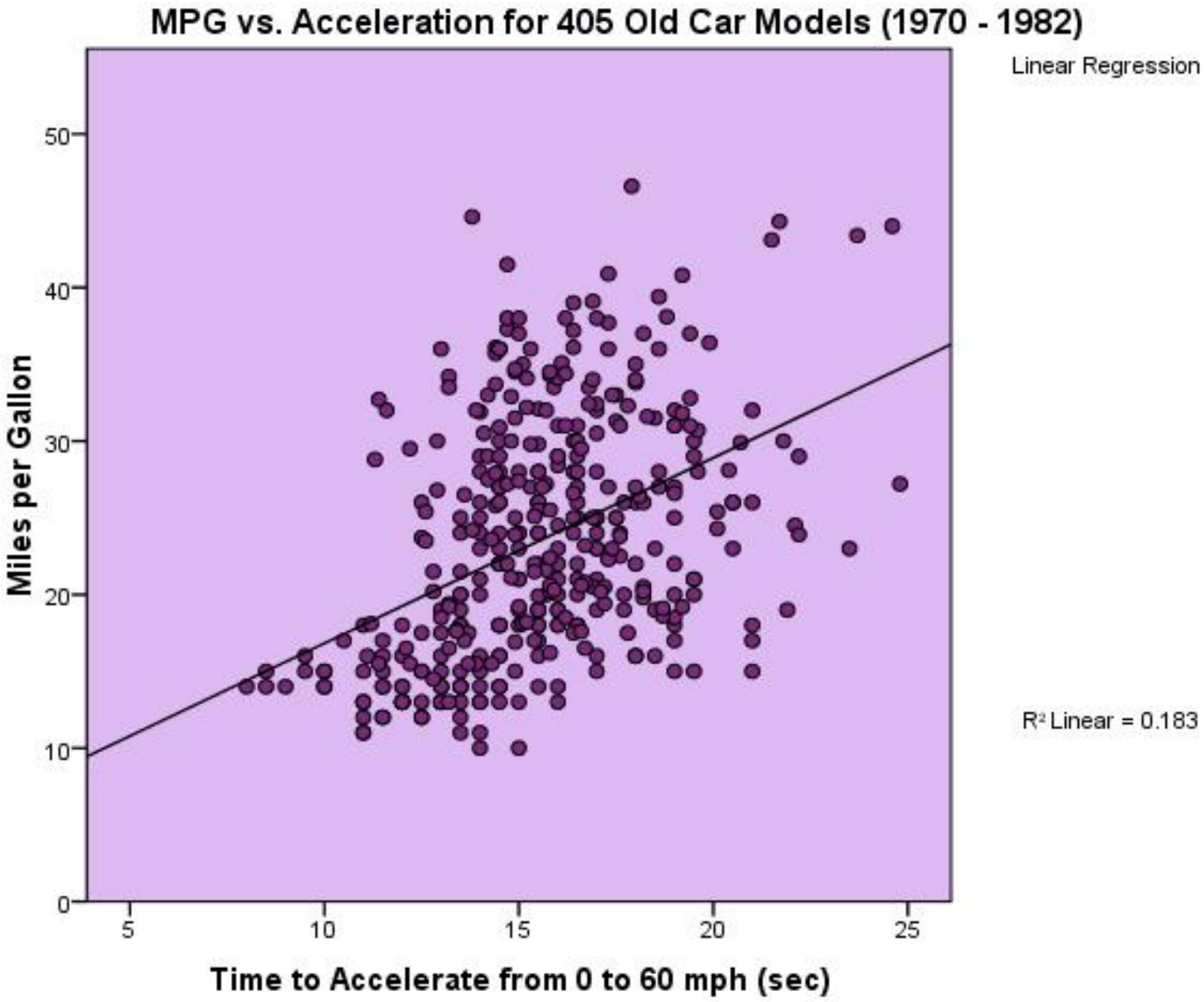

Acceleration vs. Weight for 405 Old Car Models (1970 - 1982)
Time to Accelerate from 0 to 60 mph (sec)
25
20
15
10
5
1000
2000
3000
4000
5000
6000
Vehicle Weight (lbs.)


Acceleration vs. Weight for 405 Old Car Models (1970 - 1982)
Linear Regression
Time to Accelerate from 0 to 60 mph (sec)
25
20
15
10
5
1000
2000
3000
4000
5000
6000
Vehicle Weight (lbs.)
R² Linear = 0.192

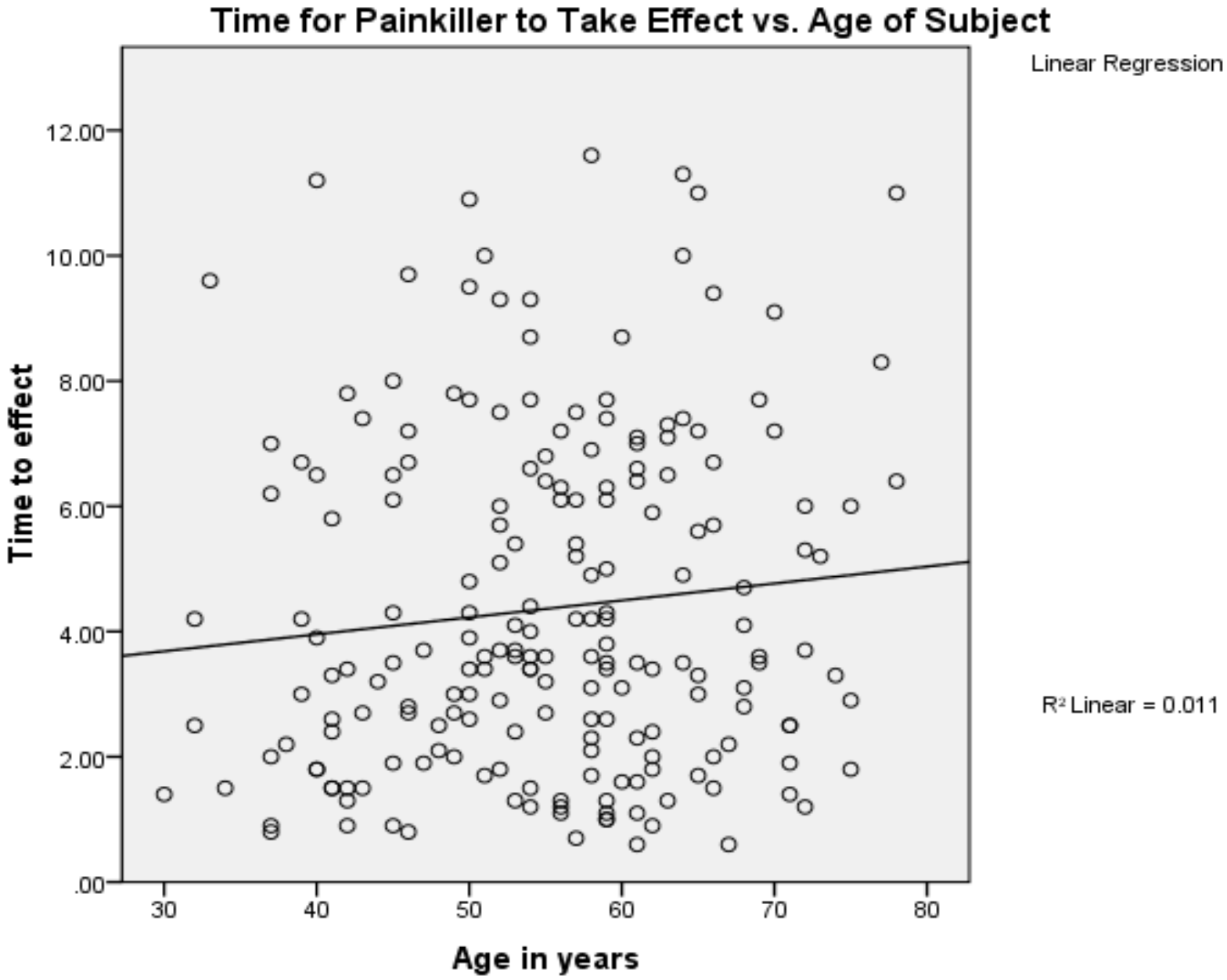

Horsepower vs. Number of Cylinders for 405 Old Car Models (1970 - 1982)
Linear Regression
Horsepower
250
200
150
100
50
0
3
4
5
6
7
8
Number of Cylinders

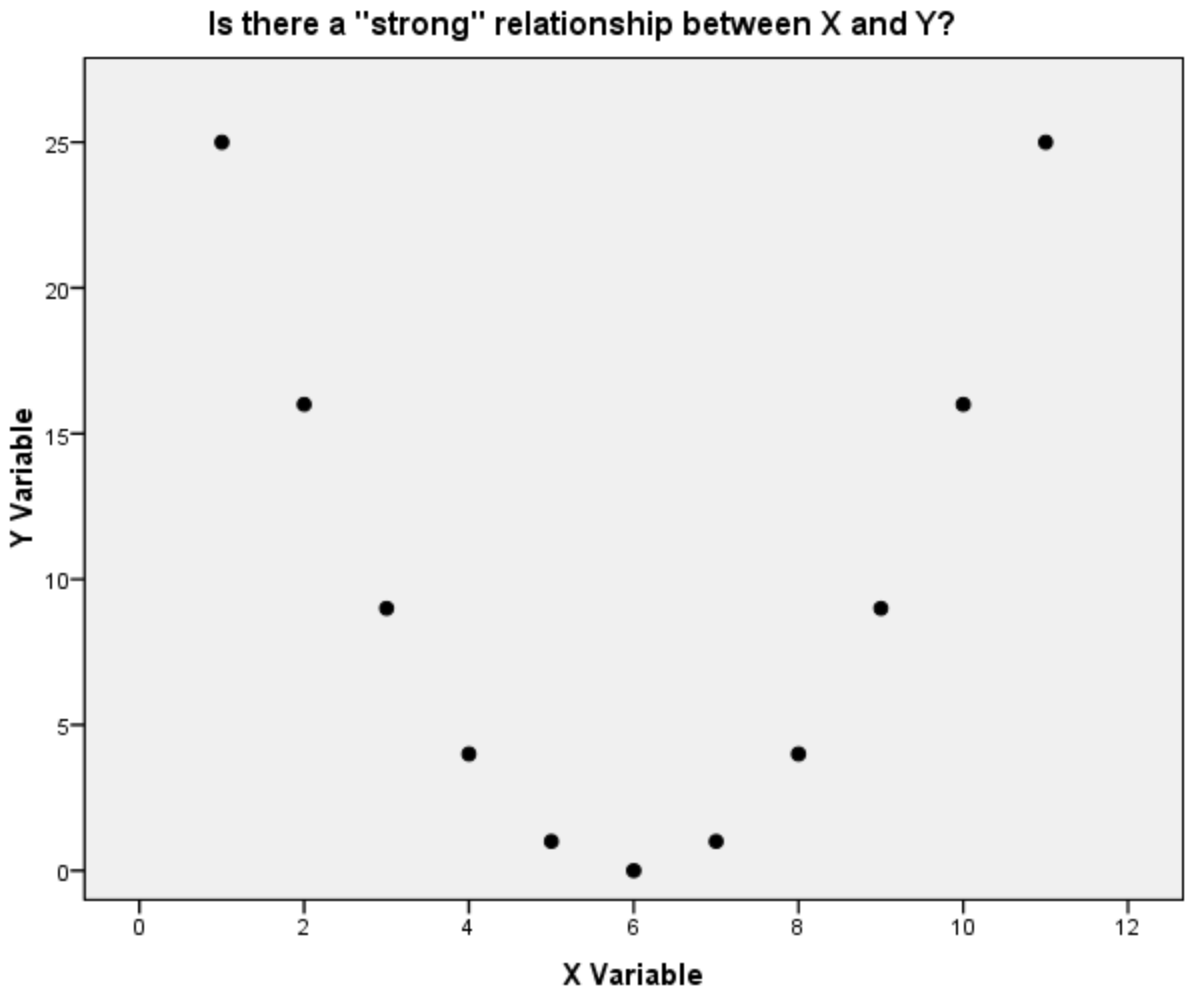

Horsepower vs. Number of Cylinders for 405 Old Car Models (1970 - 1982)
Linear Regression
Horsepower
250
200
150
100
50
0
3
4
5
6
7
8
Number of Cylinders
R² Linear = 0.712

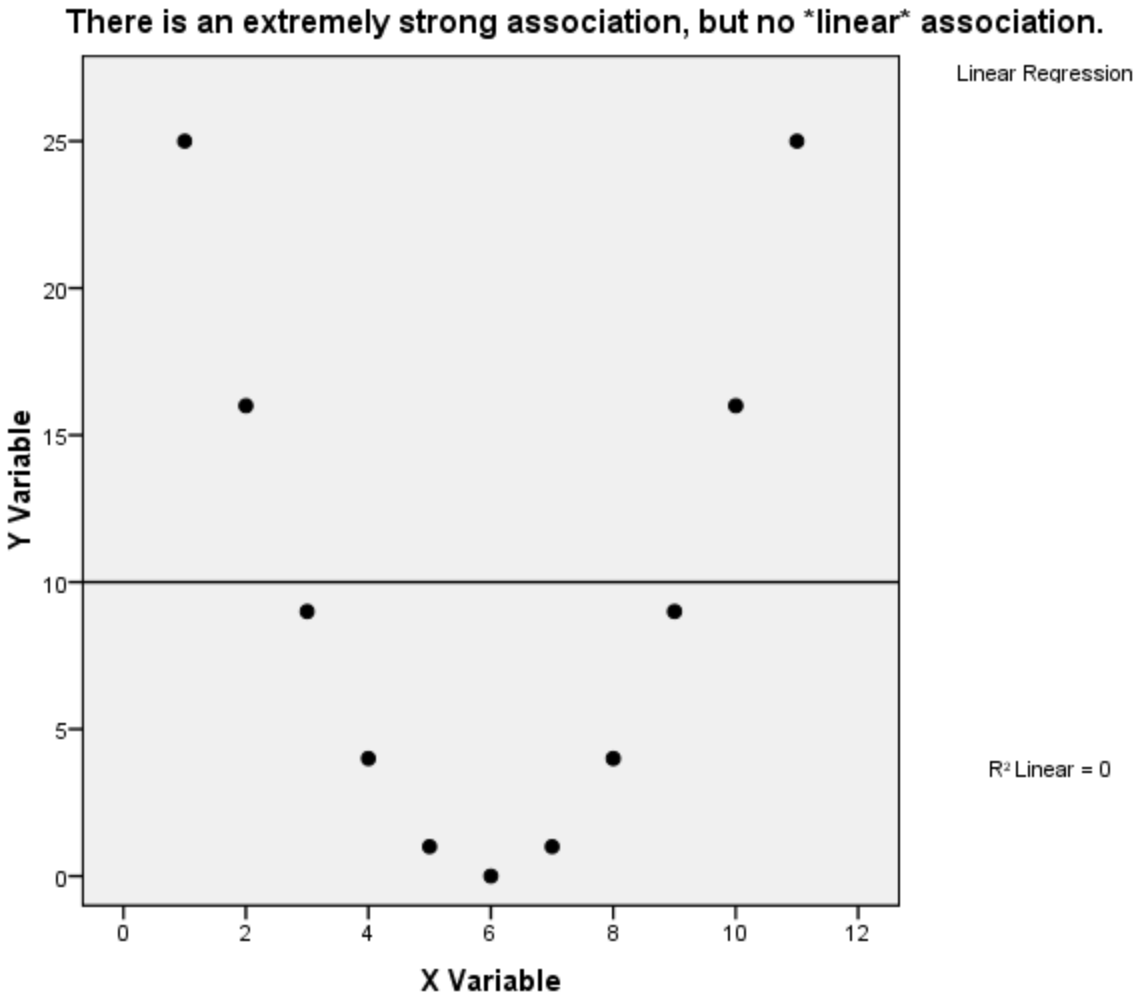

MPG vs. Acceleration for 405 Old Car Models (1970 - 1982)
Miles per Gallon
0
10
20
30
40
50
5
10
15
20
25
Time to Accelerate from 0 to 60 mph (sec)

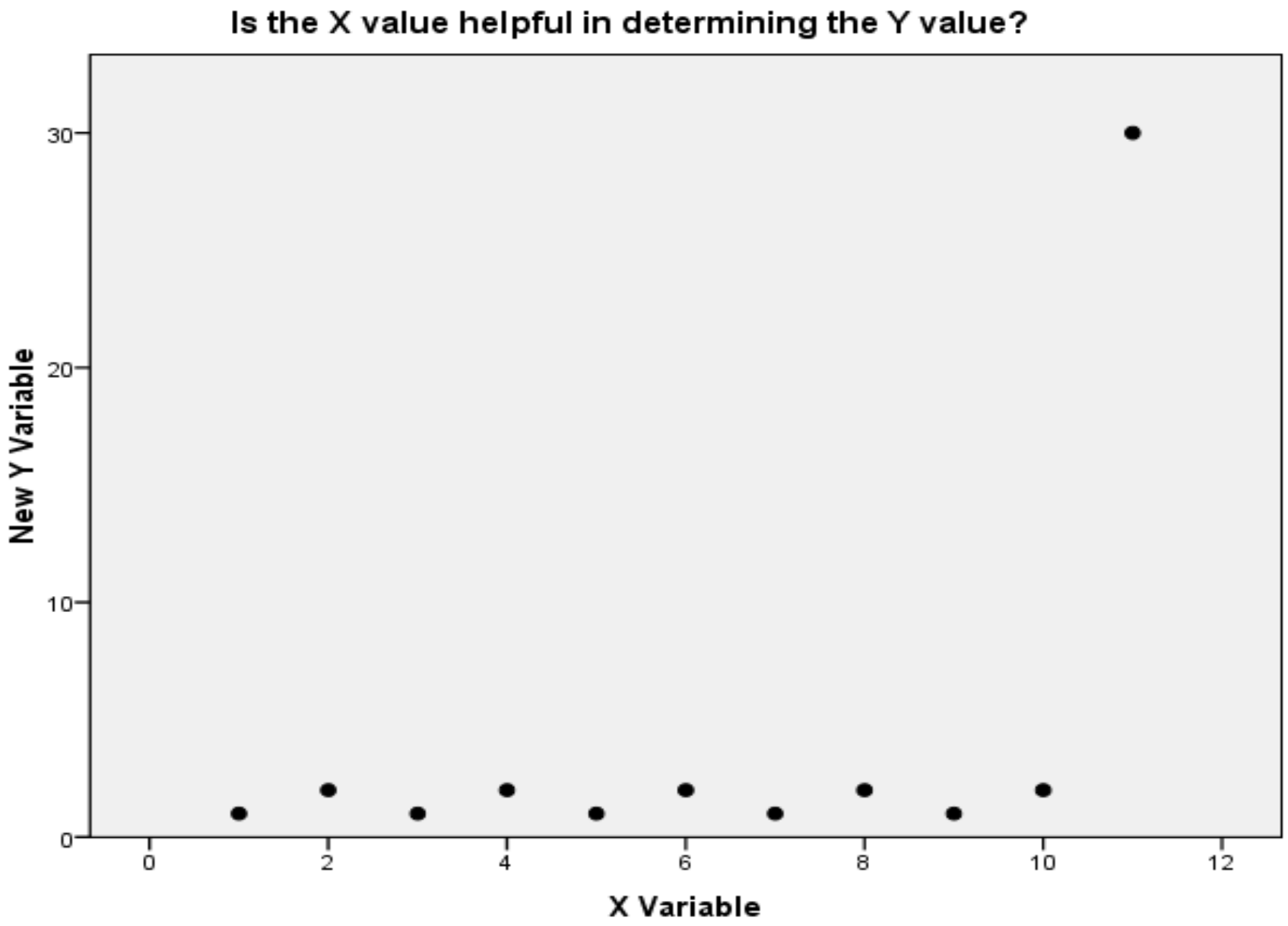

MPG vs. Acceleration for 405 Old Car Models (1970 - 1982)
Linear Regression
Miles per Gallon
0
10
20
30
40
50
5
10
15
20
25
Time to Accelerate from 0 to 60 mph (sec)
R² Linear = 0.183

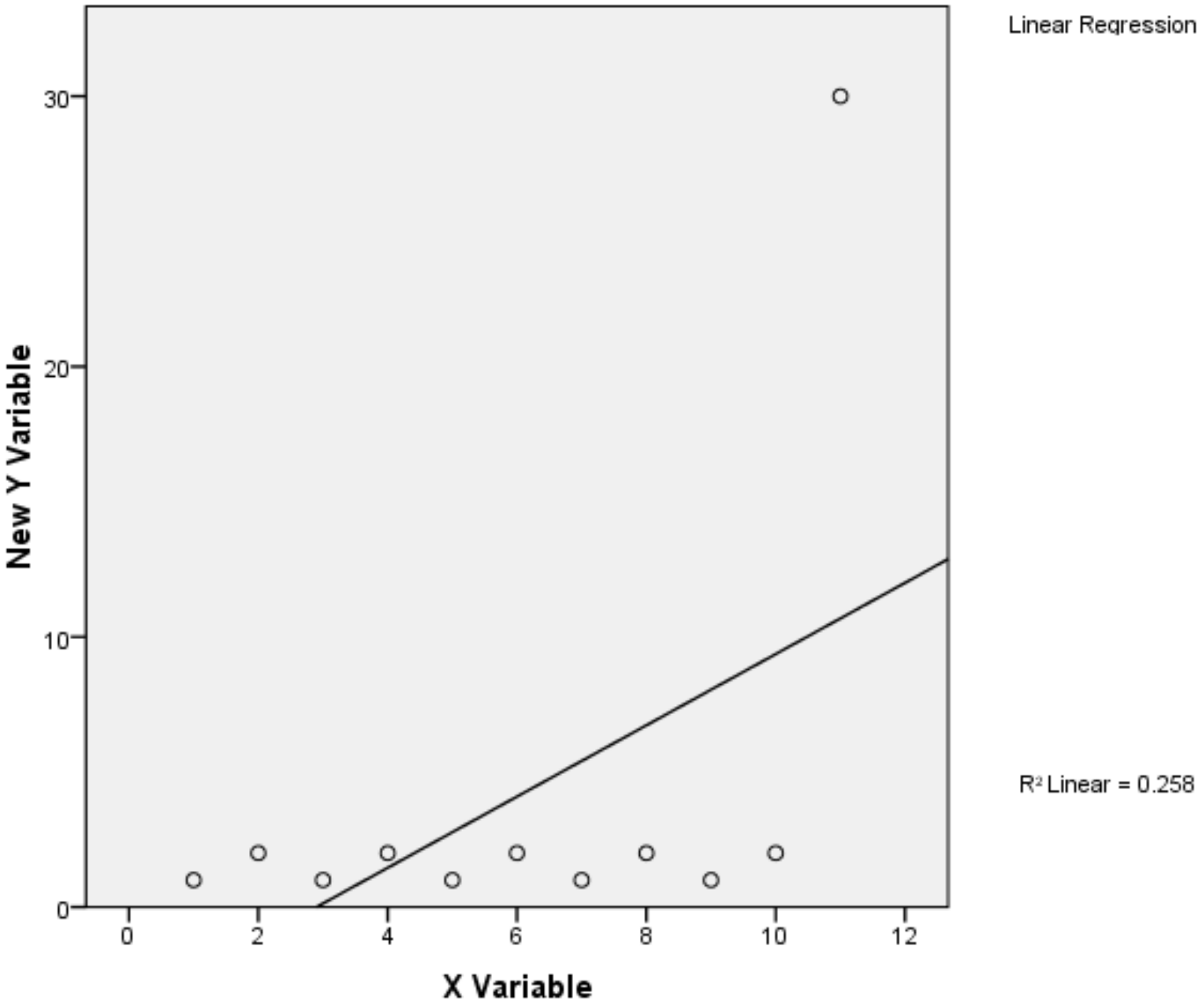

Time for Painkiller to Take Effect vs. Age of Subject
Time to effect
12.00
10.00
8.00
6.00
4.00
2.00
.00
30
40
50
60
70
80
Age in years

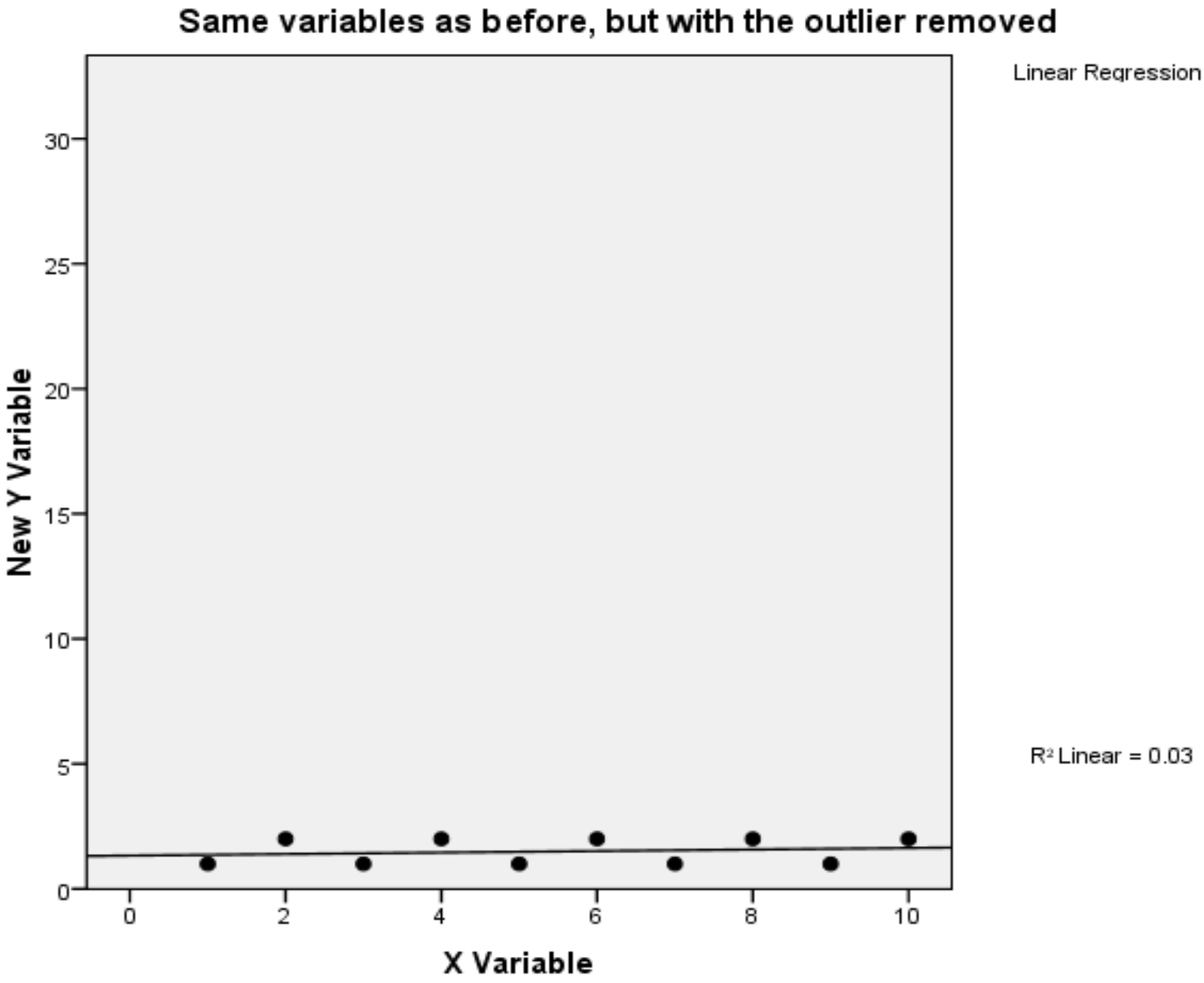

Time for Painkiller to Take Effect vs. Age of Subject
Linear Regression
12.00
10.00
8.00
6.00
4.00
2.00
.00
Time to effect
30
40
50
60
70
80
Age in years
R² Linear = 0.011


Is there a "strong" relationship between X and Y?
Y Variable
X Variable
0
5
10
15
20
25
0
2
4
6
8
10
12


There is an extremely strong association, but no *linear* association.
Linear Regression
25
20
15
10
5
0
Y Variable
0
2
4
6
8
10
12
X Variable
R² Linear = 0


Is the X value helpful in determining the Y value?
New Y Variable
30
20
10
0
0
2
4
6
8
10
12
X Variable


Linear Regression
New Y Variable
X Variable
30
20
10
0
0
2
4
6
8
10
12
R² Linear = 0.258


Same variables as before, but with the outlier removed
Linear Regression
New Y Variable
X Variable
0
5
10
15
20
25
30
0
2
4
6
8
10
R² Linear = 0.03