

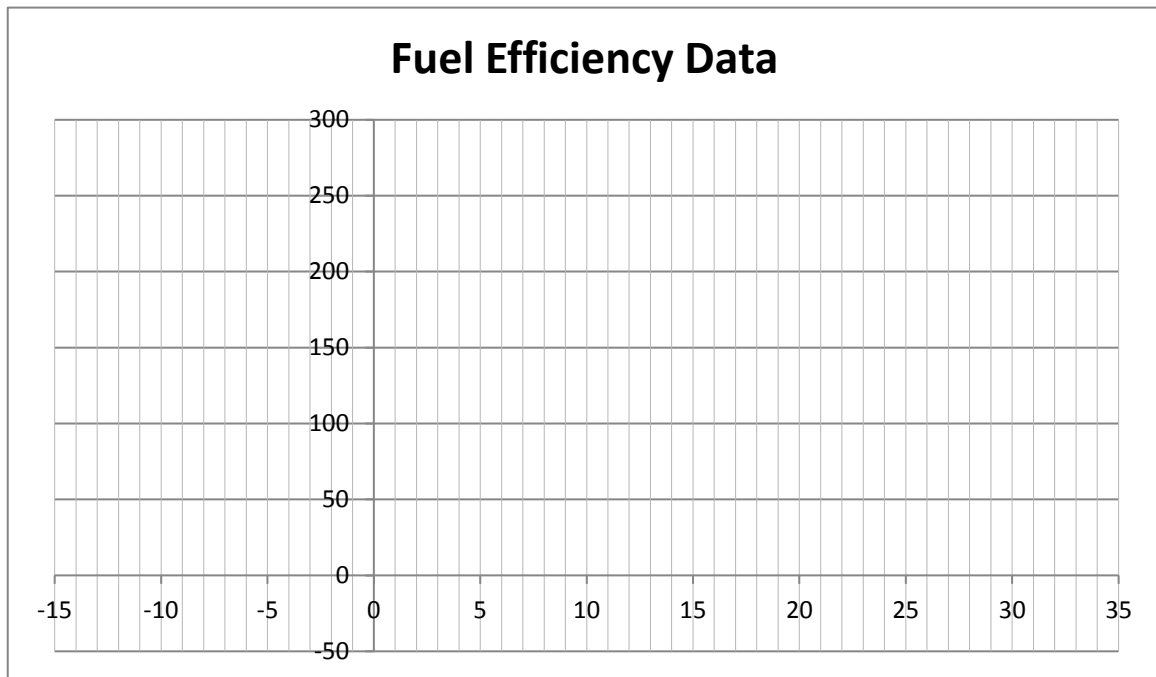
Unit 4 Day 8 Homework

The fuel efficiency of a car on a 300 mile test run can be calculated by the formula $E(g) = \frac{300}{g}$, where $E(g)$ is fuel efficiency and g is the gallons of gas used.

1. Fill in the chart below to reflect fuel efficiency as a function of gallons of gas used.

Gas used (gallons)	5	8	10	13	17	18	20	23
Fuel efficiency (miles per gallon)								

2. Create a graph to represent the function from problem 1.



3. What is your k value?
4. As the domain values continue to increase, what seems to be the range value that the graph is approaching?
5. Is there ever a time when the 300 miles can be driven using 0 gallons of gas?
6. Can someone complete the course with a fuel efficiency of 0 miles per gallon? How can we see this on your graph?