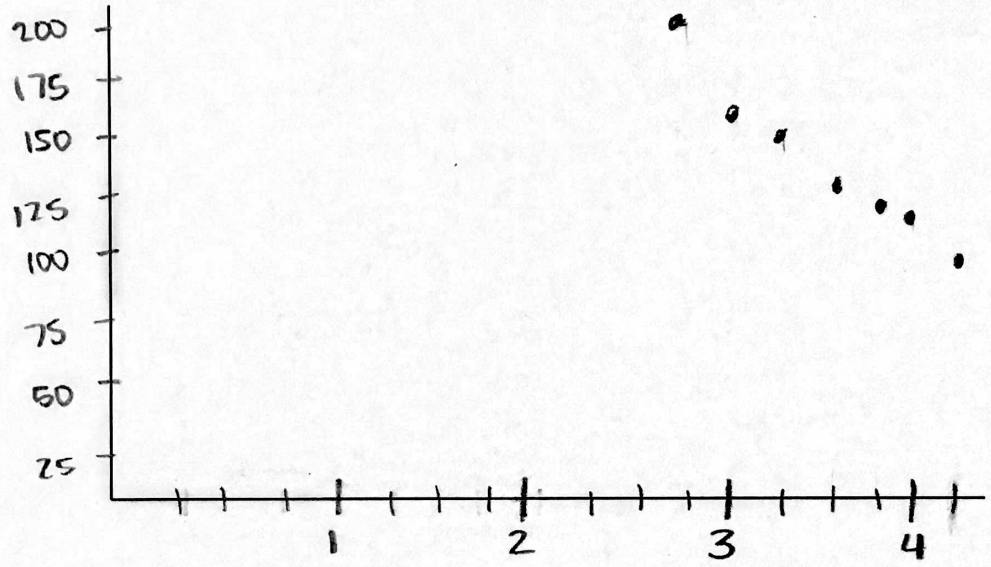
Class work

The Daytona 500 is a stock car race that is 500 miles long. Because speed varies inversely with time, we can write the following function for the race: $s = \frac{500}{t}$.

1. Fill in the chart below using the inverse variation equation above to fill in the chart.

Time to finish (hrs)	4.25	4	3.75	3.5	3.25	3	2.75	2.5	↓
Speed of car (mph)	117.65	125	133.33	142.86	153.85	166.67	181.82	200	↑

2. Graph the data collected below.



3. What is your k value?

$K = 500$

4. As the domain values increase, what seems to be the range value that the graph is approaching?

zero

5. Is there ever a time when someone will be able to complete the race in zero hours?

NO, that is impossible $s = \frac{500}{0}$ ← impossible

6. Can someone complete the race by going 0 mph? Explain from your graph or algebraically.

NO, if you do not drive, you will not be able to complete the race: $0 = \frac{500}{t}$ ← impossible