Name _____   Date _____

Graphing Constant Acceleration

Consider yourself taking a bicycle ride in Thompson Park. You come to top of a big hill and decide to start from rest and coast down the hill. As you coast down the hill, you pick up speed. You are accelerating at a rate of 4 m/s^2. Fill in the chart. Create a graph.

Change in speed for a bicycle coasting down a hill

Time (s)	Speed (m/s)
0	0
1	
2	
3	
4	
5	
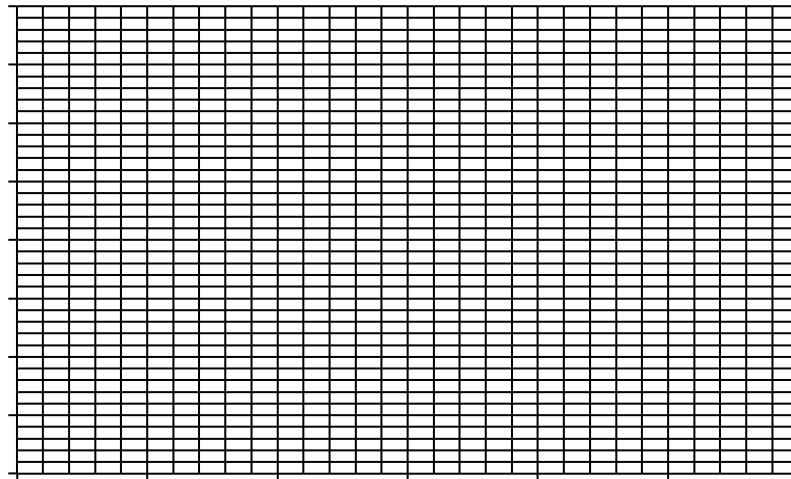
1) What is the slope of the trendline?

2) What does the slope of the trendline represent?

3) Give an equation for the trendline.

4. What factors will affect the acceleration of you and your bicycle as you coast down the hill?

5. How long would you have to coast to reach a speed of 30 m/s?

6. What distance would you travel to reach a speed of 30 m/s?