

FEBRUARY 9, 2015 ^{1ST} ^{2ND} STARTER

Mr. and Mrs. Jones have 3 children, each under 20 years old, but none of them are the same age.

Last year, the product of their ages was 224. This year, the product of their ages is 360.

What are the children's ages this year?



KAPATE

2/9 Graphing Rates

You will need a **calculator** today so either get out your phone, if it has one, or go get one off of the counter.

What is a rate? a fraction with different units

ex: $\frac{5 \text{ mi}}{2 \text{ hr}}$, $\frac{75 \text{ gal}}{1 \text{ min}}$

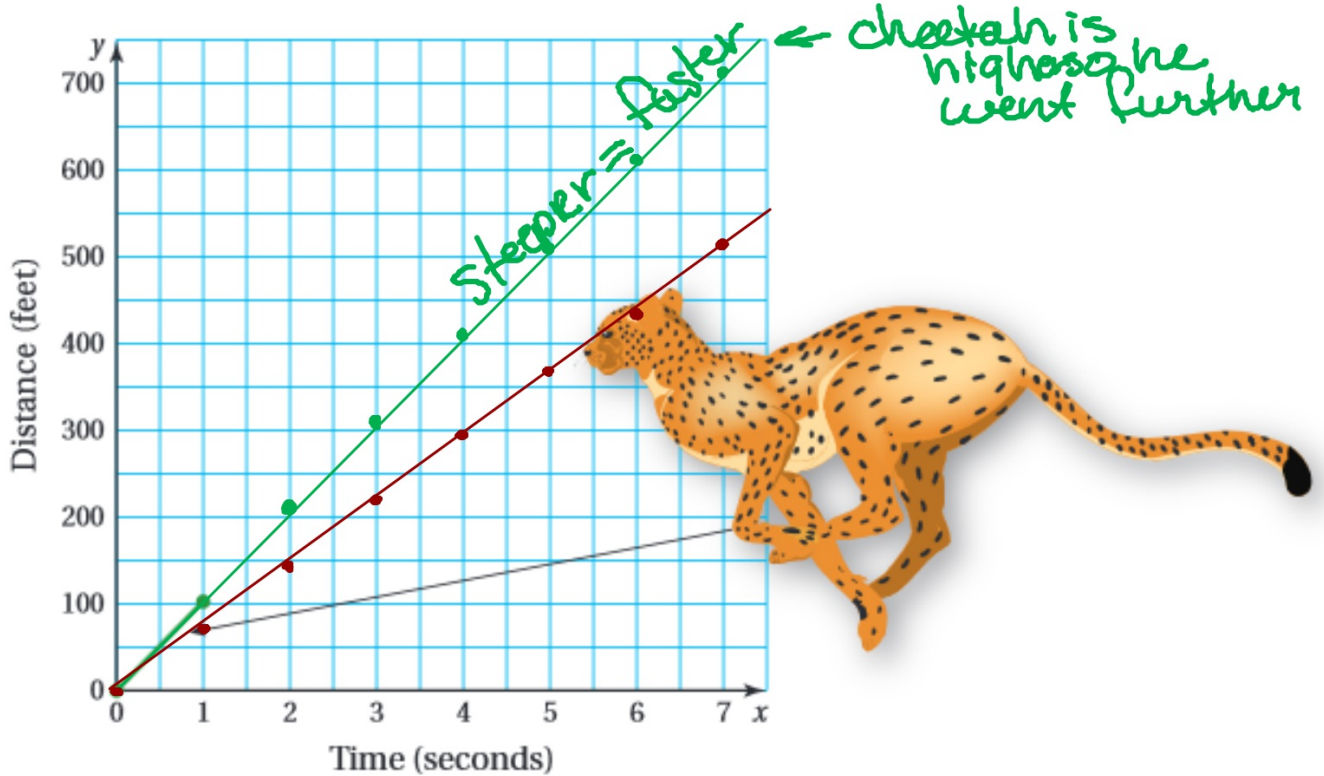
Fill in the rest of the chart, if the gazelle runs 50 mph.

$$\frac{50 \text{ mi}}{\text{hr}} \cdot \frac{1 \text{ hr}}{3600 \text{ sec}} \cdot \frac{5280 \text{ ft}}{1 \text{ mi}} = 73.3$$

	Cheetah	Gazelle
Time (seconds)	Distance (feet)	Distance (feet)
0	0	0
1	102.6	73.3
2	205.2	146.6
3	307.8	219.9
4	410.4	293.2
5	513.0	366.5
6	615.6	439.8
7	718.2	513.1



Graph the information for both animals on the same graph.



Quick Write (60 seconds):

What can graphs tell you about rates?

Pair Share:

Person on the LEFT goes first then switch when I tell you

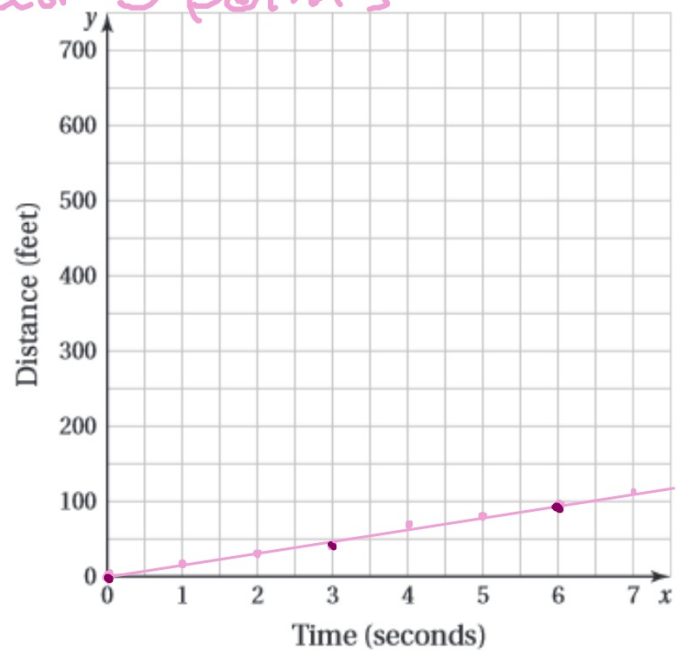
Ideas: The unit rate for the subject
the distance travelled
rates determined by steepness
steeper = faster
tells the amount at a certain time
projects info after graph

Fill in the chart then graph the information referring to the speed of a domestic pig, 16.0 ft/sec

easy to graph *use at least 3 points*

Time (seconds)	Distance (feet)
0	0
1	16
2	32
3	48
4	64
5	80
6	96
7	112

Close to the given times

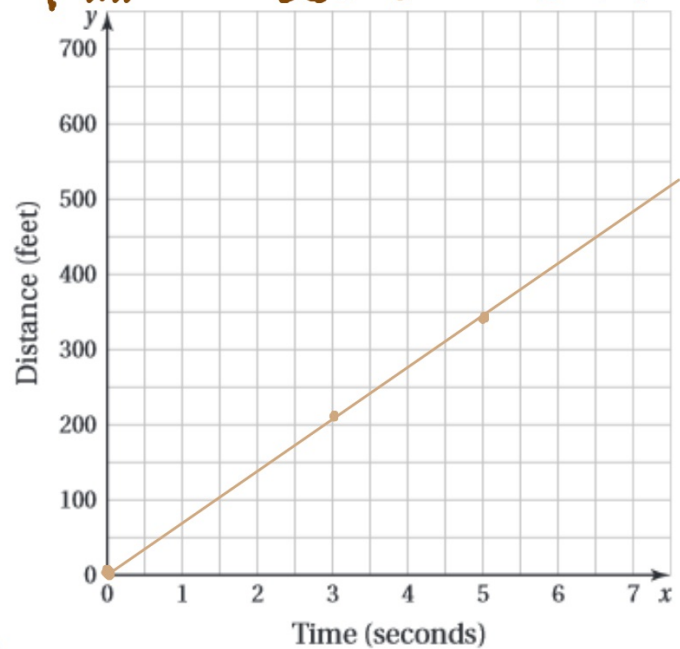


Fill in the chart then graph the information referring to the speed of a quarter horse, 47.5 mi/hr

$$47.5 \times 5280 \div 3600 = 69.666667$$

$$\frac{47.5 \text{ mi}}{\text{hr}} \cdot \frac{5280 \text{ ft}}{1 \text{ mi}} \cdot \frac{1 \text{ hr}}{3600 \text{ sec}} = 69.7$$

Time (seconds)	Distance (feet)
0	0
1	69.7
2	139.4
3	209.1
4	278.8
5	348.5
6	418.2
7	487.9



HOMWORK

Green WS 8

DUE Today