

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 of 2 different units.

What are some examples?

$$\begin{array}{ccc} \text{mi/hr} & & \\ \frac{25 \text{ mi}}{2 \text{ hrs}} & \frac{15 \text{ ft}}{1 \text{ sec}} & \frac{32 \text{ braincells}}{3 \text{ sec.}} \end{array}$$

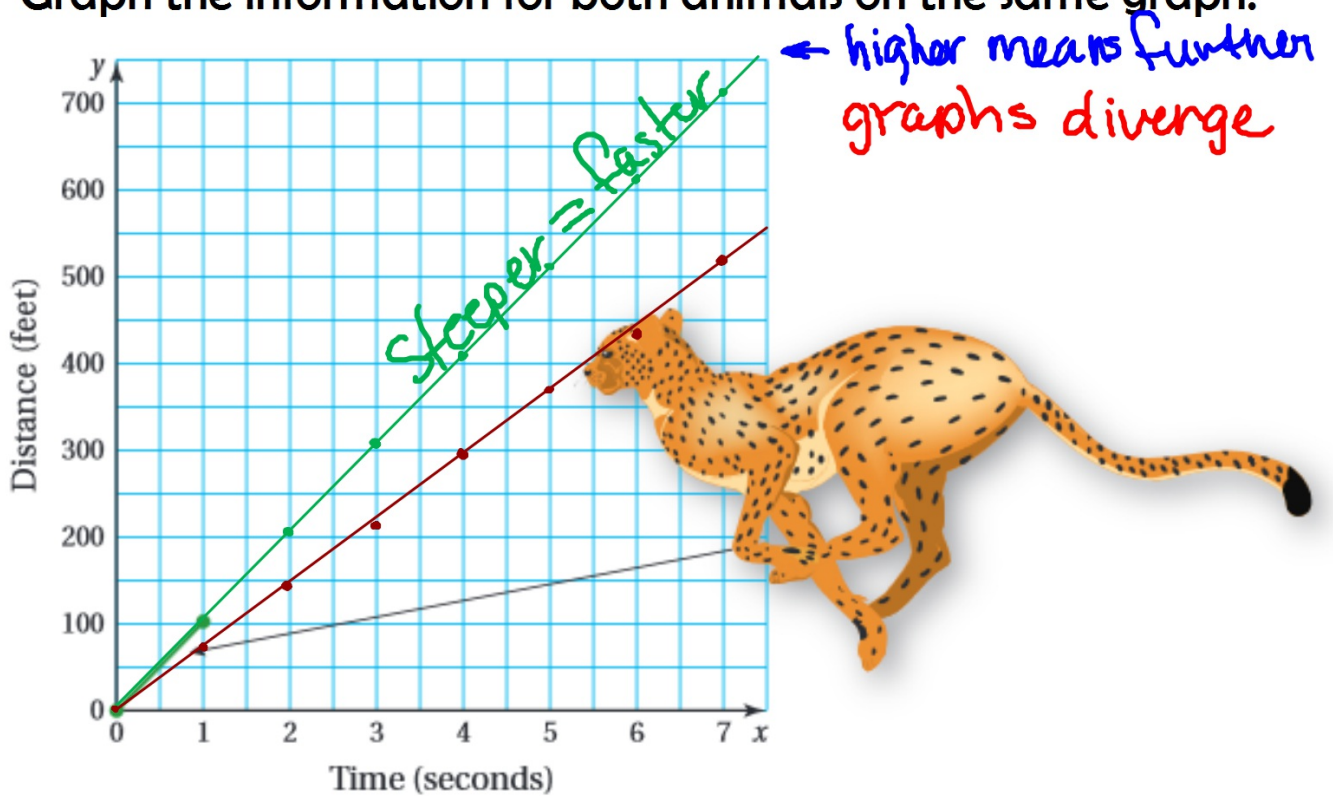
Fill in the rest of the chart, if the gazelle runs 50 mph.

	Cheetah	Gazelle
Time (seconds)	Distance (feet)	Distance (feet)
x = 0	y = 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

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



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

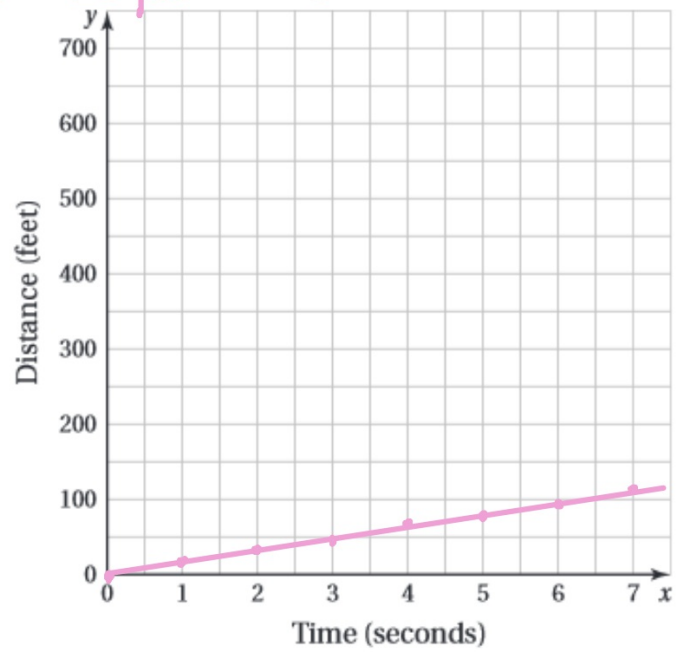
Ideas: how fast/slow something goes in a certain amount of time
tells how fast by how steep it is
tells how far something has gone
determine the units for the rate
rates are constant \therefore straight lines

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

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

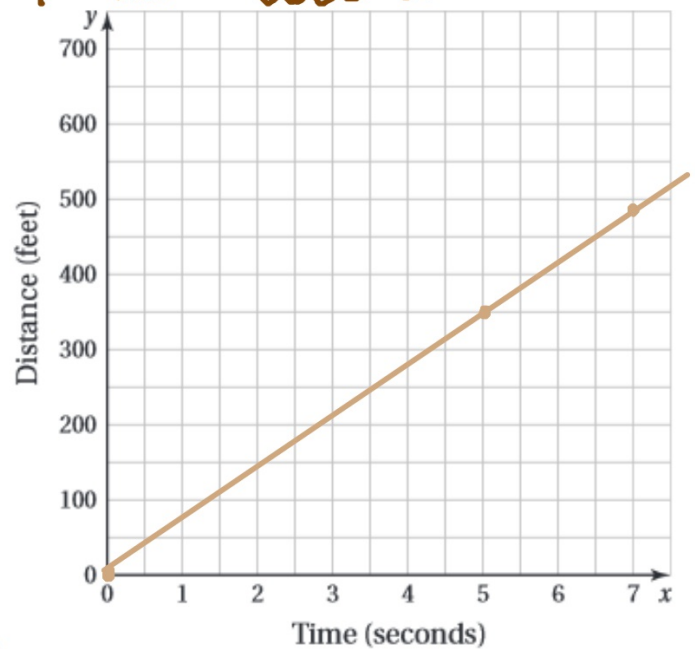
** close to 16 may even 17 was of the graph.*



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

$$\frac{47.5 \text{ mi}}{\text{hr}} \cdot \frac{5280 \text{ ft}}{1 \text{ mi}} \cdot \frac{1 \text{ hr}}{3600 \text{ sec}} = 70 \frac{\text{ft}}{\text{sec}}$$

Time (seconds)	Distance (feet)
0	0
1	70
2	140
3	210
4	280
5	350
6	420
7	490



HOMWORK

Green WS 8

DUE Thursday