

# FEBRUARY 9, 2015 <sup>5<sup>TH</sup></sup> <sup>6<sup>TH</sup></sup> STARTER

Convert each unit or rate.

1.  $1\frac{1}{2} \text{ ft} = \underline{\hspace{2cm}} \text{ in}$

2.  $11880 \text{ ft} = \underline{\hspace{2cm}} \text{ mi}$

3.  $2.5 \text{ gal} = \underline{\hspace{2cm}} \text{ qts}$

4.  $2\frac{1}{2} \text{ hr} = \underline{\hspace{2cm}} \text{ sec}$

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?** (how fast?) a fraction w/ different labels in the top + bottom

**What are some examples?**

$$\frac{5 \text{ ft}}{10 \text{ sec}}$$

$$\frac{425 \text{ brain cells}}{10 \text{ minutes}}$$

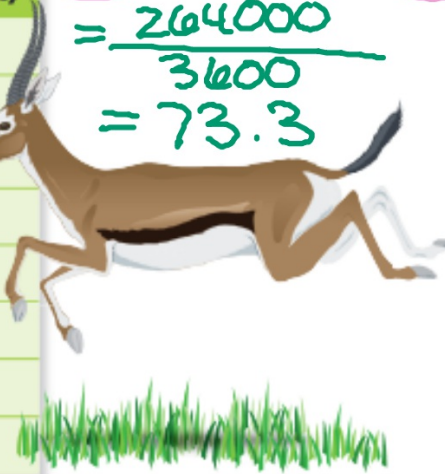
Fill in the rest of the chart, if the gazelle runs 50 mph.

	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

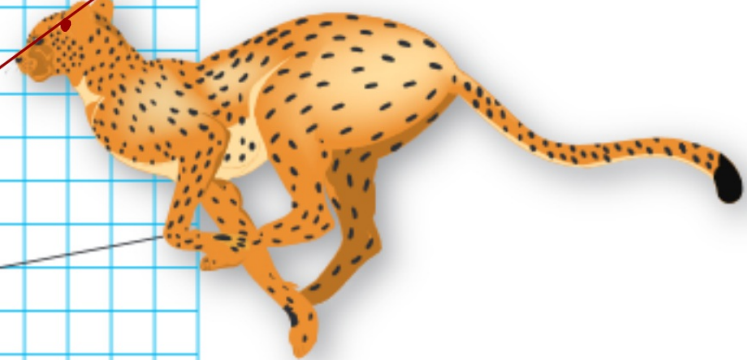
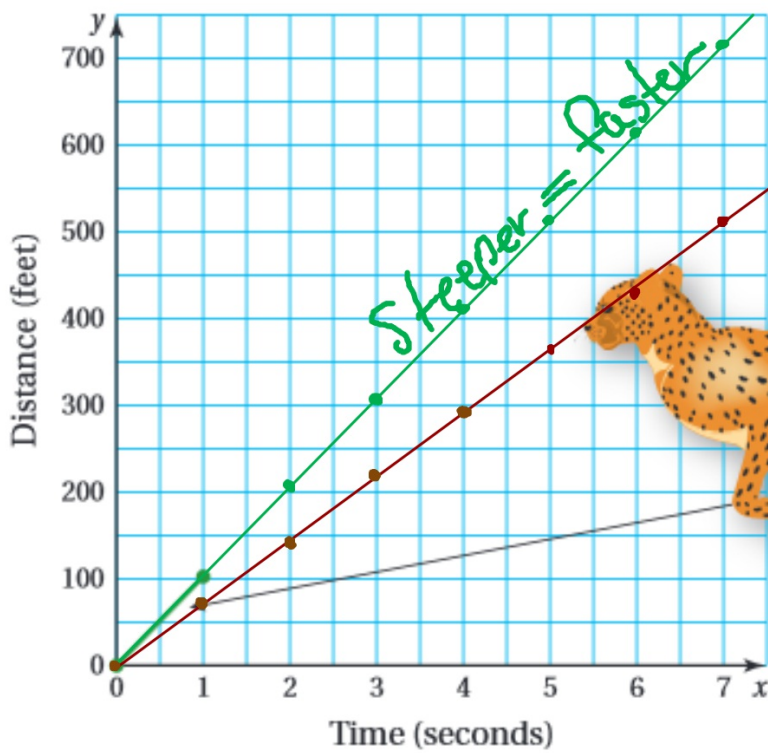
$$\frac{50 \text{ mi}}{1 \text{ hr}} \cdot \frac{1 \text{ hr}}{3600 \text{ sec}} \cdot \frac{5280 \text{ ft}}{1 \text{ mi}}$$

$$= \frac{264000}{3600}$$

$$= 73.3$$



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

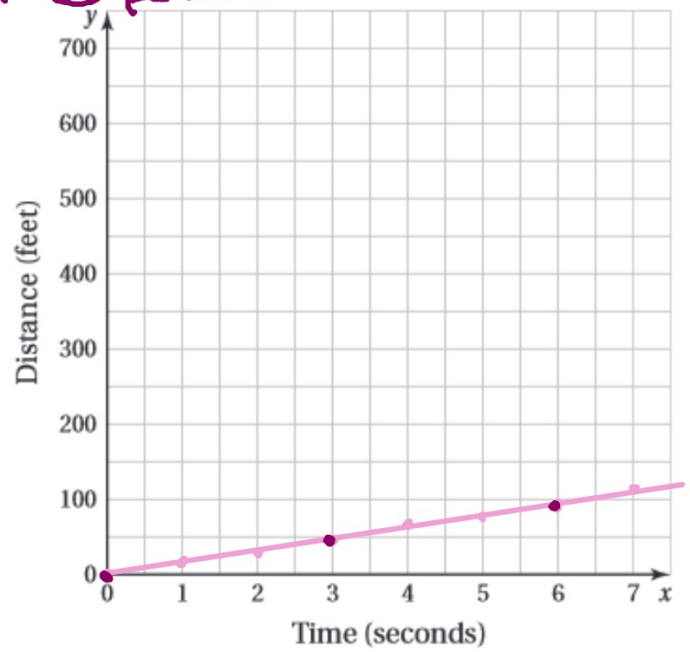
Ideas: How fast something goes per sec.  
Graphs compare differences  
Virtual vs numerical  
Steeper = faster  
more organized

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

*Check if the lines on graph.*

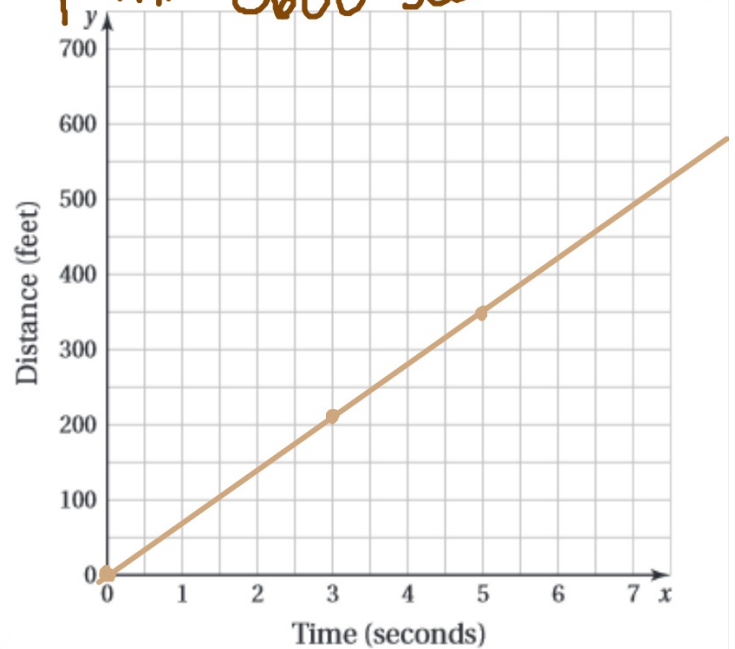


Fill in the chart then graph the information referring to the speed of a quarter horse, 47.5 mi/hr

Round to whole #

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

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





**HOMEWORK**

Lilac WS 8

**DUE** Wednesday