Math 8CP Homework February 6-7

Name _		
Per	Date _	

## Wednesday:

**1.** Barbara has a bunny that weighs 5 pounds and gains 3 pounds per year. Her cat weighs 19 pounds and gains 1 pound per year. When will the bunny and the cat weigh the same amount?

<b>a)</b> At w	hat weig	ght does	s the l	Bunn	y beg	jin? _																
Write the equation for the Bunny's growth								ar?	Graph (label!)													
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year											++	++	++				+				++	+
weight	:																				$\square$	$\mp$
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<b>b)</b> () + ),	hotwoid	abt door	tha	Cath	agin	2			-	$\left  \right $	++	+	++		_		$\left  \right $	$\left  \right $	+	_	++	+
b) At what weight does the Cat begin? How much weight does the Cat gain each																				+		
Write t	he equa	tion for	the C	aťs g	growtl	h							+		_					_	$\square$	+
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What c	ho the va	riables	renre	sentí	7				_				++							_	$\left  \right $	+
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What c	loes the	point of	<sup>:</sup> inter	secti	on re	orese	ent?															

What does the point of intersection represent? (write a sentence)

**2.** Graph the lines (on the same graph) using the slope and y-intercept.

a. $y = -\frac{2}{3}x + 2$	m =	b =
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b.  $y = \frac{4}{3}x - 4$  m = b =

Solution\_\_\_\_\_

- **3**. Larry can walk 5 blocks in 3.5 minutes.
- a. What is his speed (unit rate)?
- b. How far can he walk in 12 minutes?
- c. How long will it take him to walk 22 blocks?

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## Thursday:

1. To rent a jet ski at Sam's costs \$25 registration plus \$3 per hour. At Claire's it costs \$5 registration plus \$8 per hour. At how many hours will the rental cost of both shops be equal? Write an equation that represents both shop's charges. Graph both equations.

Sam's starting cost is \_\_\_\_\_ and his cost per hour is \_\_\_\_\_. eqaution\_\_\_\_\_

Claire's starting cost is \_\_\_\_\_ and her cost per hour is \_\_\_\_\_. equation\_\_\_\_\_

x = \_\_\_\_\_ y = \_\_\_\_\_

Write a sentence explaining the point of intersection:

**2.** Solve; do the check step:

a. -7x + 10 = -4(x - 2) **b**. 3x + 9 - 4x = -(2x - 5) - 7

## 3. Find the slope and rule and fill in the table:

х	0	1	2	5	8	12	41
У			4		7		

**4.** Find the volumes given the formula (remember to label!!):

a. V of cylinder =  $\pi r^2 \cdot h$ 

b. V of rectangular prism = length x width x height

Slope \_\_\_\_\_

Rule



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