$\qquad$
$\qquad$ Date $\qquad$

## 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?
a) At what weight does the Bunny begin? $\qquad$
How much weight does the Bunny gain each year? $\qquad$
Write the equation for the Bunny's growth $\qquad$ Graph (label!)

| year |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| weight |  |  |  |  |  |  |  |  |  |

b) At what weight does the Cat begin?

How much weight does the Cat gain each year?
Write the equation for the Cat's growth

| year |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| weight |  |  |  |  |  |  |  |  |  |

What do the variables represent?
X = $\qquad$ $\mathrm{y}=$ $\qquad$

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

Solution $\qquad$

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?

## 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 $\qquad$ and his cost per hour is $\qquad$ . eqaution $\qquad$
Claire's starting cost is $\qquad$ and her cost per hour is $\qquad$ . equation $\qquad$
$x=$ $\qquad$ $y=$ $\qquad$


Write a sentence explaining the point of intersection:
2. Solve; do the check step:
a. $-7 x+10=-4(x-2)$
b. $3 x+9-4 x=-(2 x-5)-7$
3. Find the slope and rule and fill in the table:

| x | 0 | 1 | 2 | 5 | 8 | 12 | 41 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| y |  |  | 4 |  | 7 |  |  |

Slope $\qquad$
Rule $\qquad$
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


