Name:_____

Period:_____

Directions: Graph the system of equations to find the intersection.

1.
$$3x - 2y = -15$$
 and $y - 3 = \frac{3}{4}(x - 5)$

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Directions: Solve each system of equations.

2.
$$y = 6x + 4$$

 $3x - 2y = -26$
3. $6x - 5x - 7$

$$6x - y = -27$$

$$5x - 7y = -4$$

$$4x - 8y = 24$$
4.
$$y = \frac{2}{4}x - 3$$

5.
$$4x + 7y = -4 9x + 5y = 34$$

6.
$$y = 2x + 9$$

 $y = \frac{1}{6}x - 13$

$$4x - 3y = 28$$

7.
$$y = \frac{4}{3}x - 6$$

Directions: Solve each word problem by using the 5 steps. **Show all work!!!**

8. Mickie has \$51 in \$1 and \$5 bills. She has 15 bills. How many of each does Mickie have?

9. Peter orders office supplies for his company. One week, he ordered 12 reams of white paper and 4 reams of colored paper, costing \$110. A week later, he ordered 10 reams of white paper and another 4 reams of colored paper. This time it cost \$97. How much does a ream of white paper and a ream of colored paper cost?

10. Later, Peter ordered 20 boxes of pens and 10 boxes of pencils. The cost of this order was \$140. A month later, he ordered 25 boxes of pens and 30 boxes of pencils, costing \$245. How much does a box of pens and a box of pencils cost?

11. Last week, Peter ordered 20 boxes of large envelopes and 10 boxes of small envelopes for a cost of \$127.50. This week, he ordered 24 boxes of large envelopes and 6 boxes of small envelopes. This time the cost was \$133.50. How much does a box of large envelopes and a box of small envelopes cost?

12. Martin played 2 basketball games at a local gym on Saturday evening. He scored twice as many points plus 2 in the 1st game than he did in the 2nd game. For the 2 games he scored 35 points. How many points did he score in each game?

Directions: Graph the system of inequalities and shade the correct region of solutions.

13.
$$y \ge -\frac{3}{2}x + 4$$
 and $2x - 3y < 12$

14.
$$4x + 3y < -15$$
 and $y - 3 \ge \frac{1}{2}(x + 7)$

Directions: Complete the parent function chart.

PARENT FUNCTION:	LINEAR		
FUNCTION EQUATION:		$f(\mathbf{x}) = \mathbf{x} $	
GRAPH:	$\langle \cdot \rangle$	\leftarrow	$\overset{\uparrow}{\longleftrightarrow}$
DOMAIN:			
RANGE:			$\{y \mid y = c\}$