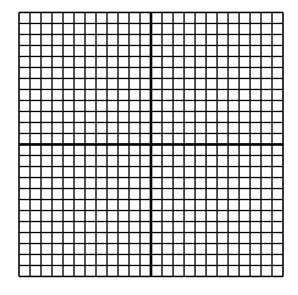
Name:

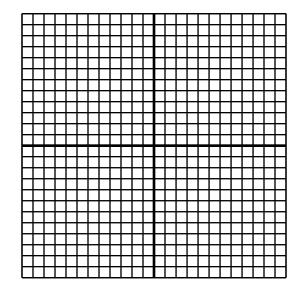
Period:

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

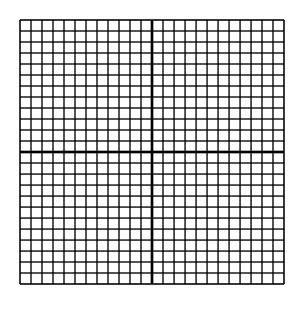
1. 
$$3x-4y=-15$$
 and  $y-9=\frac{3}{4}(x-7)$ 



2. 
$$y = \frac{4}{3}x - 5$$
 and  $y + 3 = \frac{2}{3}(x + 6)$ 



3. 
$$2x + y = -5$$
 and  $y - 4 = -2(x - 6)$ 



**Directions:** Find the intersection of each pair of lines. **Show all work.** 

4. 
$$y = -3x - 6$$
$$4x - y = -22$$

5. 
$$4x - 5y = -51$$
$$2x + 3y = 13$$

$$3x - 5y = -25$$
6. 
$$y = \frac{6}{10}x + 5$$

$$7. \quad 6x + 5y = 68$$
$$x + 5y = 28$$

8. 
$$y = \frac{2}{3}x - 13$$
$$y = -\frac{1}{6}x + 7$$

9. 
$$10x - 7y = 19$$
$$13x - 16y = 4$$

$$12x - 9y = 24$$

10. 
$$y = \frac{4}{3}x - 4$$

$$11. \quad \begin{aligned} x - y &= -19 \\ x + y &= 5 \end{aligned}$$

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

12. Roger is twice as old plus 4 years older as his brother Thomas. Together their ages add up to 19. How old are Roger and Thomas?

13. Henry made \$1,044 one week working 44 hours at 2 jobs. One job is cooking at a restaurant and the other job is teaching cooking classes at a local community college. He gets paid \$25 an hour cooking at the restaurant and \$21 an hour teaching the cooking classes. How many hours did he work at each job?

14.	Peter is did some landscaping in his backyard. He bought 2 sizes of decorative stones, large and small, to use as a walk way. He bought 13 large and 45 small stones, paying \$671. However, he had to buy 6 more large stones and 15 more small stones, paying \$252. How much does each size of stone cost?
15.	Rikki played 2 basketball games at the local gym on Wednesday evening. She scored twice as many points minus 2 in the 1 <sup>st</sup> game than she did in the 2 <sup>nd</sup> game. For the 2 games she scored 34 points. How many points did she score in each game?
16.	Jordan and Emily went shopping for some new clothes. Jordan bought some 4 t-shirts and 2 pairs of jeans for \$125. At the same store, Emily bought 3 t-shirts and 3 pairs of jeans for \$150. How much does a pair of jeans and t-shirt cost at the store?
17.	Taylor made 22 points on 8 baskets while playing a basketball game. Some were 2-point baskets and the rest were 3-point baskets. How many of each did she score in the basketball game?

18. Monica worked a total of 48 hours one week earning \$1,080. She works as a receptionist at a local legal firm and as barista at a local coffee shop. Monica worked 12 more hours as a receptionist than as a barista. She gets paid \$27 an hour as a receptionist and \$15 an hour as a barista. How much did she make at each job?

**Directions:** Complete the parent function chart.

PARENT FUNCTION:	CONSTANT	LINEAR	ABSOLUTE VALUE
FUNCTION EQUATION:			
GRAPH:	<b>←</b>	<b>←</b>	<b>←</b>
DOMAIN IN SET NOTATION:			
RANGE IN SET NOTATION:			