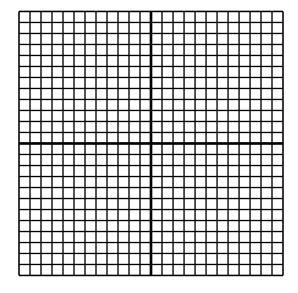
Name:

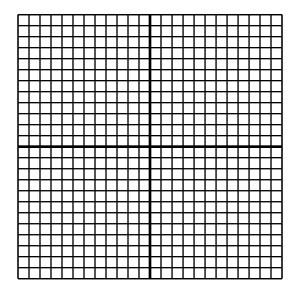
Period:

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

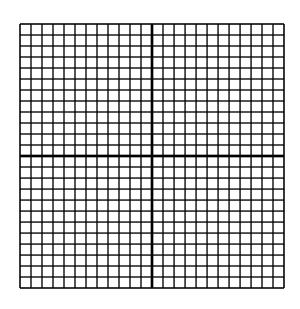
1. 
$$y = -\frac{4}{3}x + 6$$
 and  $y + 10 = \frac{1}{4}(x + 7)$ 



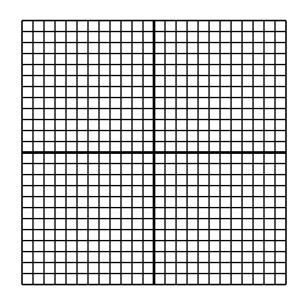
2. 
$$y = \frac{2}{5}x + 1$$
 and  $2x - 5y = 20$ 



3. 
$$3x-4y=-18$$
 and  $y-12=-\frac{2}{3}(x+7)$ 



4. 
$$3x-4y=12$$
 and  $y+9=\frac{3}{4}(x+8)$ 



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

5. 
$$y = -3x - 6$$
$$4x - y = -22$$

$$6. \quad y = \frac{5}{6}x + 3$$
$$y = 2x - 11$$

7. 
$$3x - 4y = -43$$
$$y = 5x - 2$$

8. 
$$y = -\frac{3}{4}x - 8$$
$$y = -3x + 10$$

Dir	ections:	Identify both variables, set-up both equations, then use substitution to solve the word problems, and then answer the question in a complete sentence. <b>Show all work!!!</b>
9.	-	twice as old minus 1 year older as her sister Rachel. Together their ages add up to 35. How old are nd Rachel?
10.	an hour	orks 2 jobs, working as a driver for a package delivery service and as a guitar tutor. He makes \$16 delivering packages and \$30 an hour tutoring guitar students. One week he worked 45 hours \$860. How many hours did he work at each job that week?
11.	the 2 <sup>nd</sup> g	played 2 basketball games at the local gym on Saturday. He scored twice as many points plus 5 in game than he did in the 1 <sup>st</sup> game. For the 2 games he scored 35 points. How many points did he each game?
12.		bought some t-shirts and some pairs of jeans for \$168. She bought 2 more t-shirts than she did pair. How much is each t-shirt and pair of jeans?

Directions: Find the intersection of each pair of equations by using elimination. Show all work!!!

13. 
$$7x - 4y = 6$$
$$5x - 4y = 10$$

14. 
$$9x - 2y = 36$$
$$x + 2y = 24$$

15. 
$$3x - 5y = -76$$
$$3x + 4y = 23$$

16. 
$$8x + 5y = -83$$
$$2x - 5y = 73$$

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

PARENT FUNCTION:		CONSTANT
FUNCTION EQUATION:	f(x) =  x	
GRAPH:	<b>←</b> →	<b>←</b> →
DOMAIN IN SET NOTATION:		
RANGE IN SET NOTATION:		