Algebra 1
Systems of Equations Review/Parallel Lines

Solve each system by *elimination*.

1.
$$-3x+3y=18$$
$$5x-3y=-26$$

2.
$$x-9y=-27$$
$$-2x+3y=24$$

3.
$$4x-6y=-18$$
$$x-3y=0$$

4.
$$-x+6y=-12$$
$$4x-2y=-18$$

5.
$$-4x+2y=18$$
$$-8x+y=15$$

6.
$$-5x-8y=-2$$
$$-x+y=-3$$

Solve each system by *substitution*.

7.
$$6x-y=6$$
$$3x+4y=3$$

8.
$$2x-2y=8$$
$$-2x+y=-10$$

9.
$$9x-6y=-27$$
$$-10x-5y=30$$

Solve each system by *graphing*.

10.
$$y=\frac{1}{2}x+6$$
$$y=\frac{11}{2}x-4$$

11.
$$-2y=x+14$$
$$-3x-2y=18$$

12. Write an equation parallel to $y=5-\frac{2}{3}x$ through the point $(0,8)$.

13. Write an equation perpendicular to $y=5-\frac{2}{3}x$ through the point $(0,-10)$.

14. Write an equation parallel to $y=-7+2x$ through the point $(3,12)$.

15. Write an equation perpendicular to $y=-7+5x$ through the point $(15,4)$.

16. Find the equation of the line through $(-5,-1)$ and $(-15,-7)$.

ANSWERS:

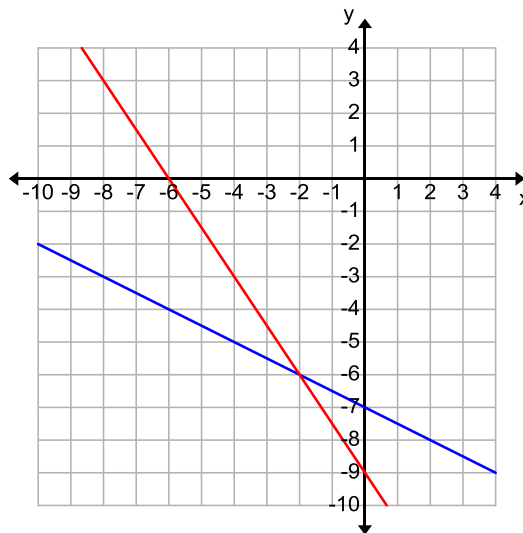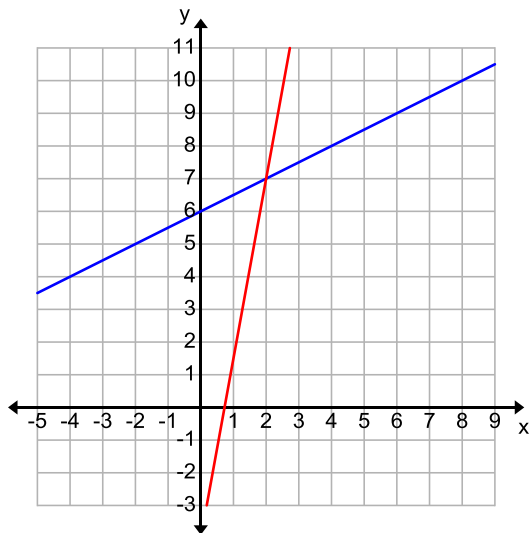|			
1.	$(-4,2)$	2. $(-9,2)$	3. $(-9,-3)$
4.	$(-6,-3)$	5. $(-1,7)$	6. $(2,-1)$
7.	$(1,0)$	8. $(6,2)$	9. $(-3,0)$

DID YOU REMEMBER TO LABEL EACH LINE WITH THE EQUATION AND GIVE THE SOLUTION?

10.
$(2,7)$

11.
$(-2,-6)$

12. $y = 8 - \dfrac{2}{3}x$

13. $y = -10 + \dfrac{3}{2}x$

14. $y = 12 + 2(x-3)$

15. $y = 4 - \dfrac{1}{5}(x-15)$

16. $y = -1 + \dfrac{3}{5}(x+5)$