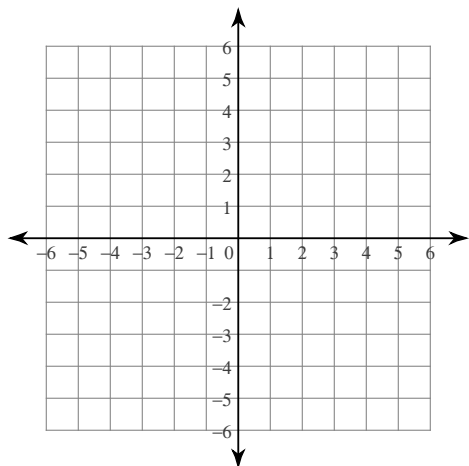


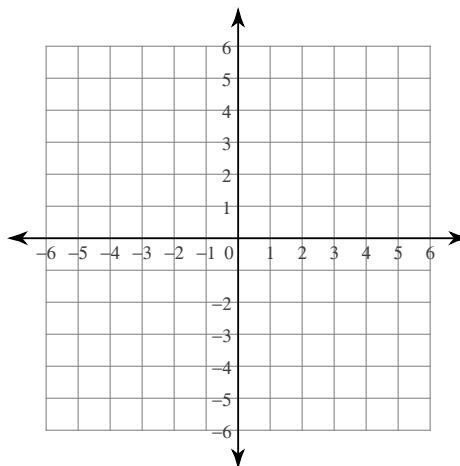
## Combined Skills on Lines and 2 by 2 Linear Systems

Sketch the graph of each line. Identify the intercepts.

1)  $3x - y = 2$

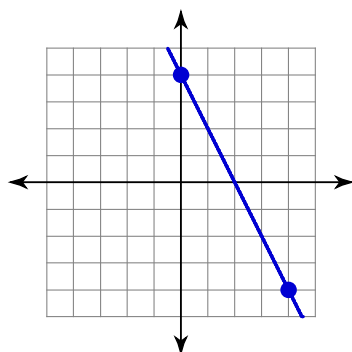


2)  $y = -5x + 4$



Find the slope of each line.

3)



4)  $y = -5x - 5$

5) through  $(-6, 9), (-6, -14)$

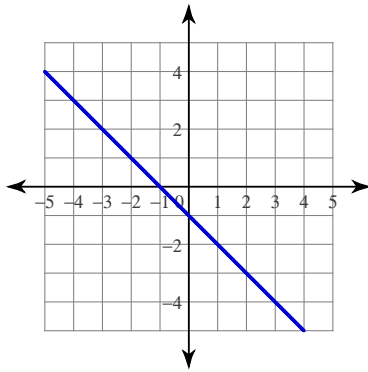
6)  $2x - 3y = -9$

7) parallel to  $-4 - y = 2x$

8) perpendicular to  $x - 5y = -10$

Write the standard form of the equation of each line.

9)



10) through:  $(0, -1)$ , slope =  $-\frac{1}{4}$

11) through:  $(0, -4)$  and  $(-1, 3)$

12) through:  $(-3, -5)$ , parallel to  $y = \frac{7}{4}x + 4$

13) through:  $(4, 0)$ , perp. to  $4x + 3y = 0$

14) through  $(8, -4)$  and parallel to the  $y$ -axis

**Solve each system by substitution.**

15)  $y = -3x + 5$   
 $2x + 3y = 1$

16)  $y = x + 4$   
 $y = 3x + 4$

17)  $-8x - 6y = -4$   
 $-x + y = -4$

**Solve each system by addition.**

18)  $-x + 5y = 26$   
 $7x - 5y = -2$

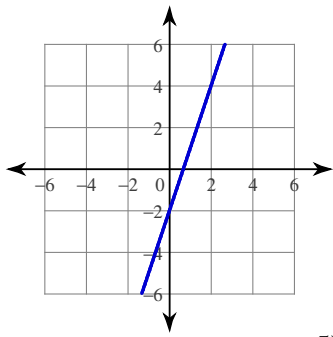
19)  $-2x + y = -12$   
 $-10x + y = -28$

20)  $8x + 8y = 8$   
 $-4x - y = 8$

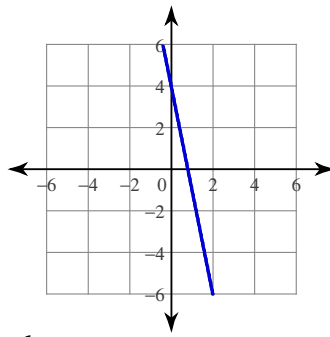
21)  $5x + 6y = 16$   
 $6x - 5y = 7$

# Answers to Combined Skills on Lines and 2 by 2 Linear Systems

1)



2)



3)  $-2$

4)  $-5$

5) Undefined

6)  $\frac{2}{3}$

7)  $-2$

8)  $-5$

9)  $x + y = -1$

10)  $x + 4y = -4$

11)  $7x + y = -4$

12)  $7x - 4y = -1$

13)  $3x - 4y = 12$

14)  $x = 8$

15)  $(2, -1)$

16)  $(0, 4)$

17)  $(2, -2)$

18)  $(4, 6)$

19)  $(2, -8)$

20)  $(-3, 4)$

21)  $(2, 1)$