Unit III. Making Linear Equations Part 1 [11.1]

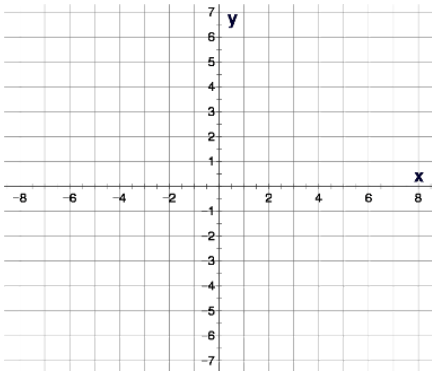
Write in slope, y-intercept form and graph

1. $2x + 3y = 15$

m =

(,)

(,)



2. $5x - 3y = 18$

m =

(,)

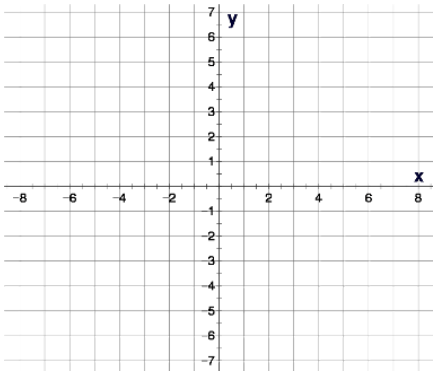
(,)

1. $3x + 4y = 12$

m =

(,)

(,)



2. $2x - 5y = 20$

m =

(,)

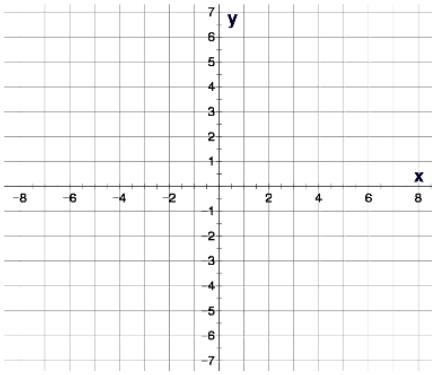
(,)

1. $-4x + 5y = -30$

m =

(,)

(,)

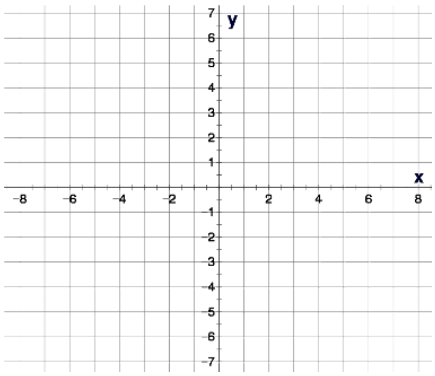


2. $4x - 3y = 18$

m =

(,)

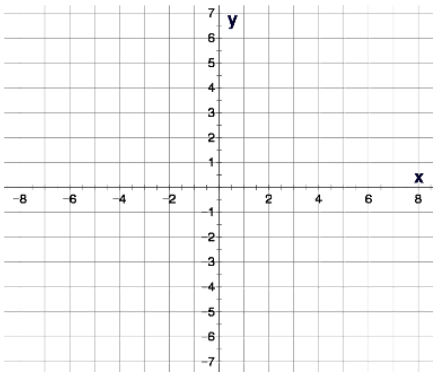
(,)



m =

(,)

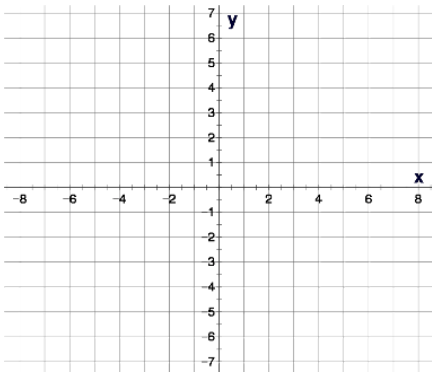
(,)



m =

(,)

(,)



Making Linear Equations Part 1 [11.2]

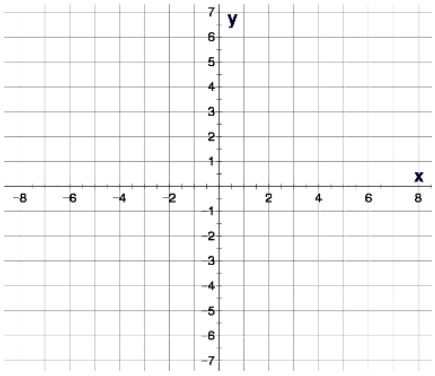
Write in slope, y-intercept form and graph

3. $-8x-3y=-18$

m =

(,)

(,)



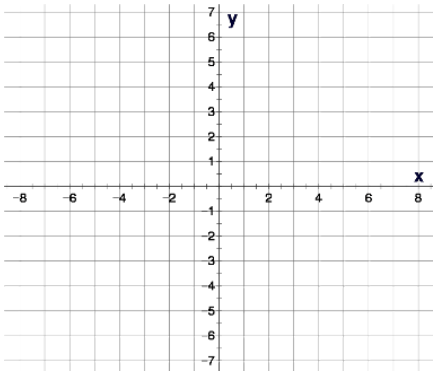
4. $-6x+8y=-24$

3. $-5x-4y=-24$

m =

(,)

(,)



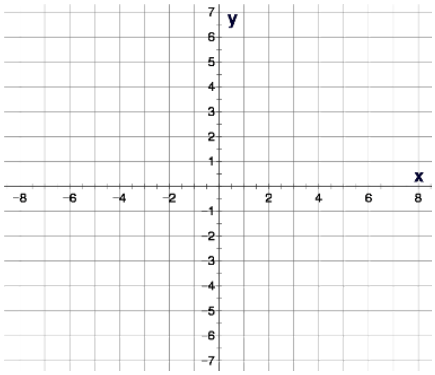
4. $-2x+5y=-20$

3. $-4x-5y=-40$

m =

(,)

(,)

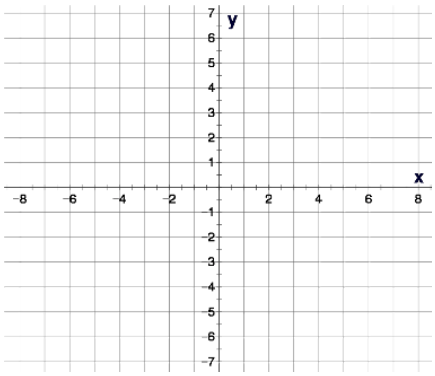


4. $-4x+7y=-21$

m =

(,)

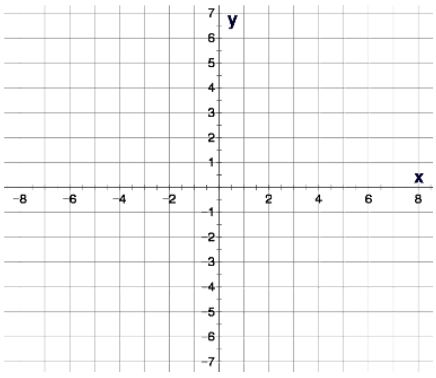
(,)



m =

(,)

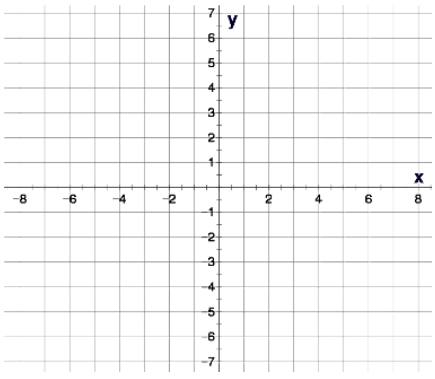
(,)



m =

(,)

(,)



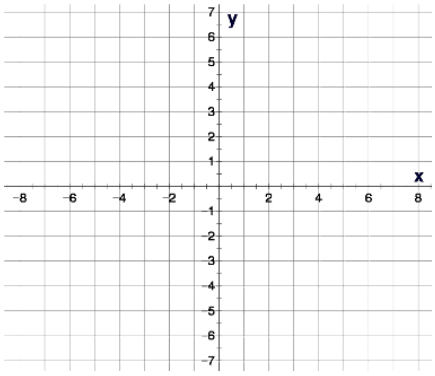
Write in slope, y-intercept form and graph

5. $8x + 3y = 18$

m =

(,)

(,)

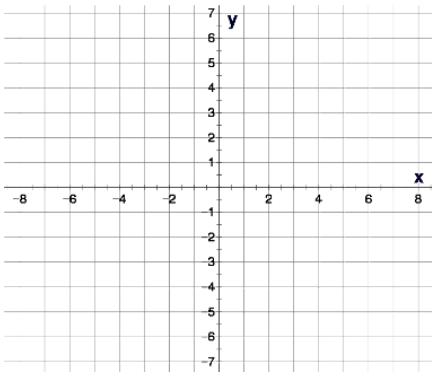


6. $6x - 8y = 24$

m =

(,)

(,)

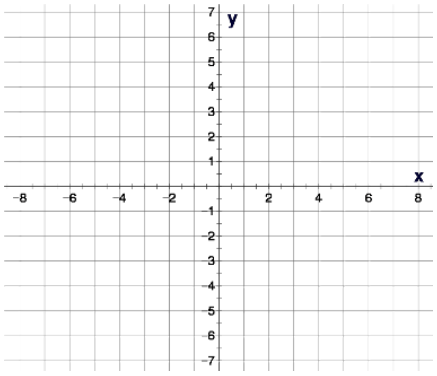


5. $5x + 4y = 24$

m =

(,)

(,)

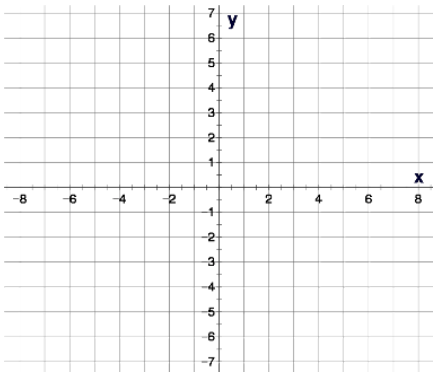


6. $2x - 5y = 20$

m =

(,)

(,)

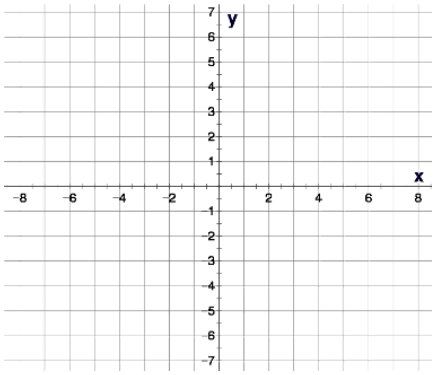


5. $4x + 5y = 40$

m =

(,)

(,)

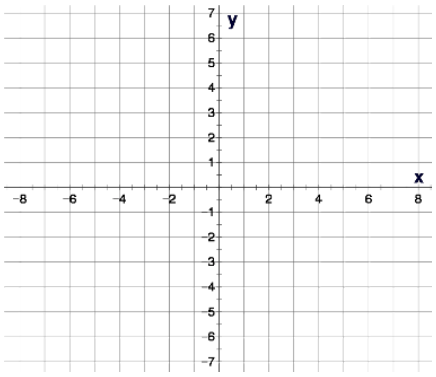


6. $4x - 9y = 27$

m =

(,)

(,)



Find the slope using the slope formula:

1. (3 , 5)
   (1 , 2)

1. (4 , 7)
   (1 , 3)

1. (4 , 8)
   (2 , 5)

2. (-3 , -5)
   (-1 , -2)

2. (-4 , -7)
   (-2 , -3)

2. (-5 , -9)
   (-2 , -4)

3. (-3 , 5)
   (1 , -2)

3. (-4 , 4)
   (2 , -3)

3. (-5 , 6)
   (2 , -4)

4. (-3 , -5)
   (5 , -7)

4. (-4 , -4)
   (10 , -8)

4. (-1 , -1)
   (3 , -4)

Find the slope using the slope formula:

5. (3 , -5)
(-1 , 2)

5. (-4 , -7)
(-2 , 3)

5. (5 , -1)
(-2 , -2)

6. (3 , -5)
(-1 , -2)

6. (4 , -7)
(-2 , -3)

6. (-3 , -2)
(-2 , 4)

7. (-3 , -5)
(-1 , -2)

7. (-4 , 7)
(-2 , -3)

7. (-3 , -2)
(-2 , 4)

8. (4 , -8)
(-8 , -2)

8. (-5 , -7)
(-7 , 3)

8. (-3 , -7)
(-9 , -4)

Find the slope intercept equation:

1. (8 , 2)
   (4 , -4)

2. (-4 , -7)
   (-8 , -8)

1. (4 , 1)
   (2 , -2)

$y = \frac{3}{2}x - 5$

2. (-5 , -5)
   (10 , -14)

$y = -\frac{3}{5}x - 8$

1. (-3 , 12)
   (3 , 4)

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

2. (10 , -3)
   (-5 , 3)

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

Find the slope intercept equation:

3. (-6 , -13)
(6 , -7)

3. (-2 , -11)
(2 , -9)

3. (-4 , 10)
(4 , 4)

$y = \frac{1}{2}x - 10$

4. (-3 , 6)
(3 , -4)

4. (-2 ,-17)
(4 , -2)

4. (1 , -3)
(3 , -13)

$y = \frac{5}{2}x - 12$

Find a parallel and perpendicular equation through the given point:

1. $\|: y = 2x - 5 \quad (2, 3)$

$$y = 3x - 13$$

2. $\|: y = \frac{2}{3}x - 1 \ (-3, -1)$

1. $\|: y = 3x - 2 \quad (2, 3)$

2. $\|: y = \frac{3}{4}x - 2 \quad (-4, -1)$

$$y = \frac{3}{4}x + 2$$

1. $\|: y = 4x - 3 \quad (2, 3)$

2. $\|: y = \frac{2}{5}x - 3 \ (-5, 1)$

Find a parallel and perpendicular equation through the given point:

3. $\|: y = -x + 2 \ (-4, 3)$ 3. $\|: y = -x + 3 \ (-5, 3)$ 3. $\|: y = -x + 4 \ (-6, 5)$

$$y = -x - 2$$

4. $\|: y = -\frac{2}{3}x + 2 \ (6, -5)$ 4. $\|: y = -\frac{3}{2}x + 3 \ (6, -5)$ 4. $\|: y = -\frac{5}{6}x + 1 \ (6, -7)$

$$y = -\frac{3}{2}x + 4$$

Find a parallel and perpendicular equation through the given point:

4. $\perp: y = -\frac{2}{3}x + 2 \ (-6, -7)$ 4. $\perp: y = -\frac{3}{2}x + 1 \ (-6, -3)$ 4. $\perp: y = -\frac{3}{5}x + 3 \ (-6, -5)$

$$y = \frac{2}{3}x + 1$$

5. $\perp: y = 2x - 5 \quad (2, 1)$ 5. $\perp: y = 3x - 1 \quad (3, 2)$ 5. $\perp: y = 4x - 3 \quad (4, 3)$

$$y = -\frac{1}{3}x + 3$$

Find a parallel and perpendicular equation through the given point:

6. $\perp: y = \frac{2}{3}x - 1 \ (-4, 10)$ 6. $\perp: y = \frac{5}{3}x - 4 \quad (-10, 8)$ 6. $\perp: y = \frac{2}{5}x - 7 \ (-6, 10)$

$$y = -\frac{3}{5}x + 2$$

7. $\perp: y = x + 2 \ (-5, -1)$ 7. $\perp: y = x + 4 \quad (-6, -2)$ 7. $\perp: y = x - 7 \ (-7, -3)$

$$y = -1x$$

8. $\perp: y = -x + 2 \ (-5, -1)$ 8. $\perp: y = -x + 4 \quad (-6, -2)$ 8. $\perp: y = -x - 7 \ (-7, -3)$