Math 1 Period: _____ Name: _____

Test chapter 2 review

Write an equation in point-slope form for the line through the given point that has the given slope.

1) (3, 10); m = 2

(1 pt) _____

2) (10, 12); m = $-\frac{3}{7}$

(1 pt) _____

A line passes through the given points.
Write an equation for the line in point-slope form.
Then rewrite the equation in slope-intercept form.
Then rewrite the equation in standard form with integers and positive x variable.

3) (– 12, 12), (14, 6)

Point-slope form: _____ (1 pt)

Slope-intercept form: _____ (1 pt)

Standard form: _____ (1 pt)

Write an equation for the line that is parallel to the given line and that passes through the given point.

4) y = – 4x + 6 and point (– 2 , 7)

m = _____ (1 pt)

x_1 = _____ (1 pt)

y_1 = _____ (1 pt)

point-slope form = _____ (1 pt)

Tell whether the lines for each pair of equations are:
parallel, perpendicular, or neither

5) $y = \frac{4}{3}x + 5$ and $y = \frac{4}{3}x - 4$

(1 pt) _____

Find the x- and y-intercepts of each.

6) y = 6x + 2

x-int: _____ (1 pt)

y-int: _____ (1 pt)

7) 2x + y = 3

x-int: _____ (1 pt)

y-int: _____ (1 pt)

Write an equation for the line that is perpendicular to the given line and that passes through the given point.

8) y = 4x + 8 and point (1, 5)

perpendicular m = _____ (1 pt)

x_1 = _____ (1 pt)

y_1 = _____ (1 pt)

point-slope form =_____ (1 pt)

Write each equation in standard from using integers and positive x variable.

9) y = – 2x – 18

Standard form: _____ (1 pt)

10) y = 5x + 2

Standard form: _____ (1 pt)

11) $y = \frac{3}{5}x - 4$

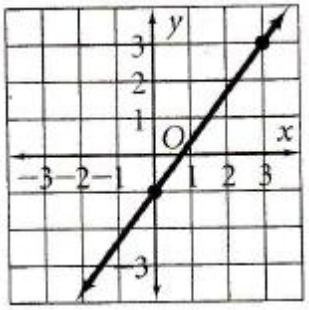
Standard form: _____ (1 pt)

12) 2y = 2x – 12

Standard form: _____ (1 pt)

Find the slope of each line.

13)



Slope = _____ (1 pt)

Find the slope of the line that passes through each pair of points.

14) (3, 12), (2, –1) m = _____ (1 pt)

15) (0, –1), (0, –2) m = _____ (1 pt)

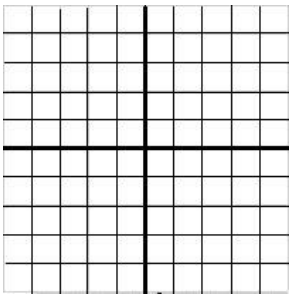
Write an equation of a line in slope-intercept for with the given slope and y-intercept.

16) m = – 2, b = – 6

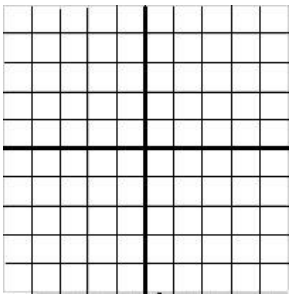
Equation: _____ (1 pt)

Graph each equation using x- and y-intercepts. (1 pt each)

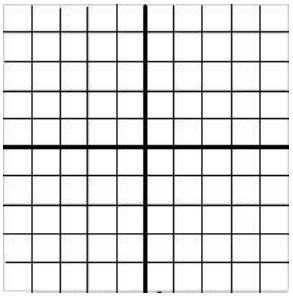
17) $2x - y = 3$



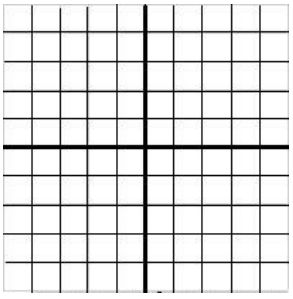
18) $2y = 6$



19). $4x - 4y = -8$



20) $2x + 8y = -16$

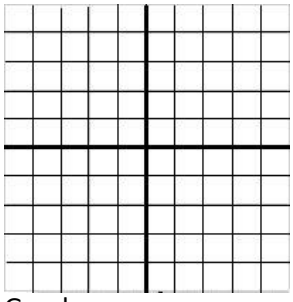


Find the slope and y-intercept of each equation. Then graph.

21) $2y + 4x = 0$

slope = _____ (1 pt)

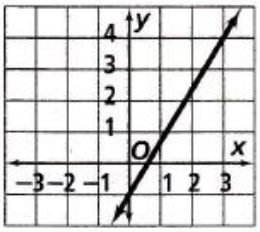
y-intercept = _____ (1 pt)



Graph
(1 pt intercept, 1 pt slope)

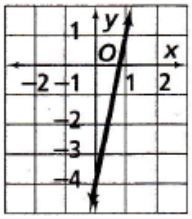
Write the slope-intercept form of the equation for each line.

22)



Equation: _____ (2 pt)

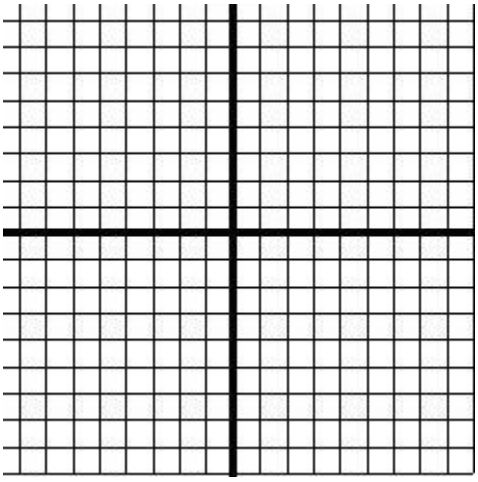
23)



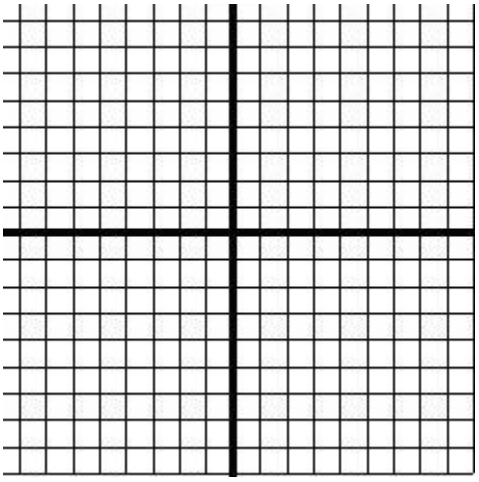
Equation: _____ (2 pt)

Graph each function.

24) $y = |x + 2|$ (1 pts)



25) $y = |x + 1| + 3$ (2 pts)



Math 1 Period: _____ Name: **KEY**

Test chapter 2 review

Write an equation in point-slope form for the line through the given point that has the given slope.

1) (3, 10); m = 2

(1 pt) $y - 10 = 2(x - 3)$

2) (10, 12); m = $-\frac{3}{7}$

(1 pt) $y - 12 = -\frac{3}{7}(x - 10)$

A line passes through the given points.
Write an equation for the line in point-slope form.
Then rewrite the equation in slope-intercept form.
Then rewrite the equation in standard form with integers and positive x variable.

3) (– 12, 12), (14, 6)

Point-slope form: $y - 12 = -\frac{3}{13}(x + 12)$ *or* $y - 6 = -\frac{3}{13}(x - 14)$ (1 pt)

Slope-intercept form: $y = -\frac{3}{13}x + \frac{120}{13}$ (1 pt)

Standard form: $3x + 13y = 120$ (1 pt)

Write an equation for the line that is parallel to the given line and that passes through the given point.

4) y = – 4x + 6 and point (– 2 , 7)

m = -4 (1 pt)

x_1 = -2 (1 pt)

y_1 = 7 (1 pt)

point-slope form = $y - 7 = -4(x + 2)$ (1 pt)

Tell whether the lines for each pair of equations are:
parallel, perpendicular, or neither

5) $y = \frac{4}{3}x + 5$ and $y = \frac{4}{3}x - 4$

(1 pt) **parallel**

Find the x- and y-intercepts of each.

6) y = 6x + 2

x-int: $-\frac{1}{3}$ (1 pt)

y-int: 2 (1 pt)

7) 2x + y = 3

x-int: $\frac{3}{2}$ (1 pt)

y-int: 3 (1 pt)

Write an equation for the line that is perpendicular to the given line and that passes through the given point.

8) y = 4x + 8 and point (1, 5)

perpendicular m = $-\frac{1}{4}$ (1 pt)

x_1 = 1 (1 pt)

y_1 = 5 (1 pt)

point-slope form = $y - 5 = -\frac{1}{4}(x - 1)$ (1 pt)

Write each equation in standard from using integers and positive x variable.

9) y = – 2x – 18

Standard form: $2x + y = -18$ (1 pt)

10) y = 5x + 2

Standard form: $5x - y = -2$ (1 pt)

11) $y = \frac{3}{5}x - 4$

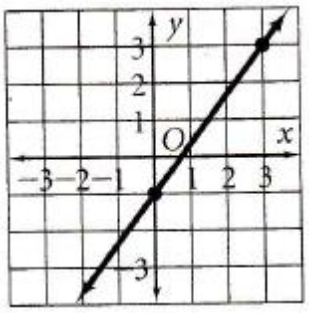
Standard form: $3x - 5y = 20$ (1 pt)

12) 2y = 2x – 12

Standard form: $2x - 2y = 12$ (1 pt)

Find the slope of each line.

13)



Slope = $\frac{4}{3}$ (1 pt)

Find the slope of the line that passes through each pair of points.

14) (3, 12), (2, –1) m = 13 (1 pt)

15) (0, –1), (0, –2) m = undefined (1 pt)

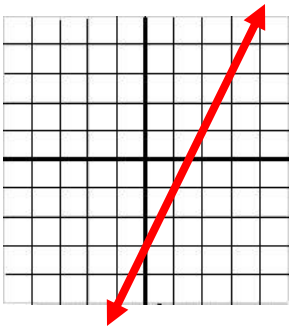
Write an equation of a line in slope-intercept for with the given slope and y-intercept.

16) m = – 2, b = – 6

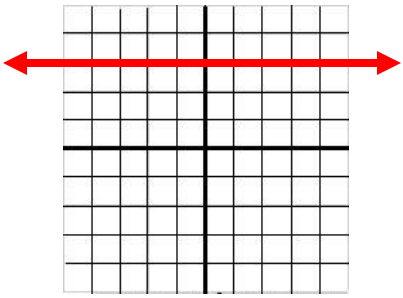
Equation: $y = -2x - 6$ (1 pt)

Graph each equation using x- and y-intercepts. (1 pt each)

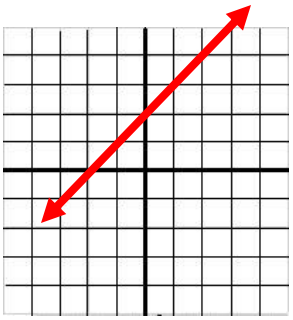
17) $2x - y = 3$



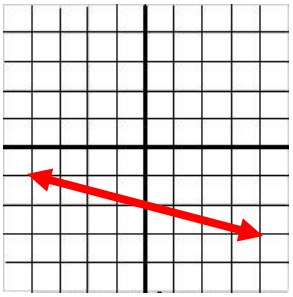
18) $2y = 6$



19). $4x - 4y = -8$



20) $2x + 8y = -16$

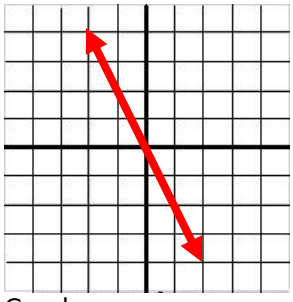


Find the slope and y-intercept of each equation. Then graph.

21) $2y + 4x = 0$

slope = -2 (1 pt)

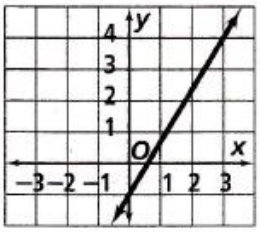
y-intercept = 0 (1 pt)



Graph
(1 pt intercept, 1 pt slope)

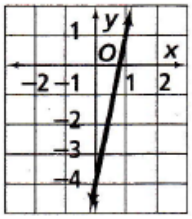
Write the slope-intercept form of the equation for each line.

22)



Equation: $y = \frac{5}{3}x - 1$ (2 pt)

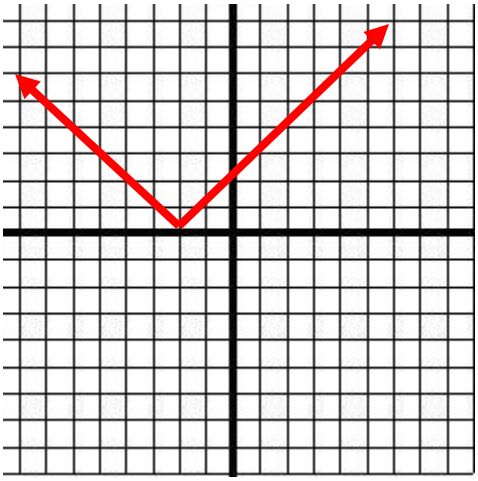
23)



Equation: $y = 5x - 4$ (2 pt)

Graph each function.

24) $y = |x + 2|$ (1 pts)



25) $y = |x + 1| + 3$ (2 pts)