



ALGEBRA 1
EOC REVIEW

LINEAR EQUATIONS

EOC Multiple

Choice Practice!

Linears EOC Multiple Choice Practice

Directions: Choose the best answer to each question. Write the letter for the answer you have chosen in the blank at the left of each question.

___ **1.** The equation of the graph of line n is $6x - 3y = 7$. Which could be the equation of a line m that is parallel to line n ?

a. $y = 2x - 1.6$

b. $y = -2x - 4$

c. $y = 1/23x - 4$

d. $y = 1/2x + 4$

___ **2.** What is the slope of a line parallel to a line that passes through the points at $(-2, 6)$ and $(3, 9)$.

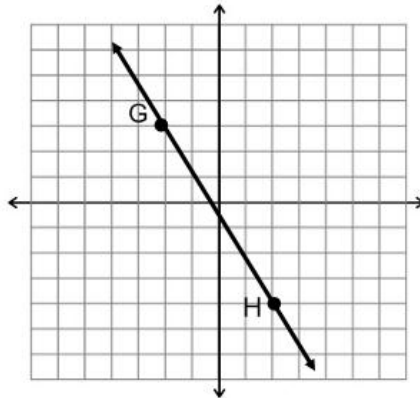
a. $1/3$

b. $3/5$

c. $5/3$

d. 3

___ **3.** Line m is the perpendicular bisector of \overline{GH} . What is the equation of line m ?



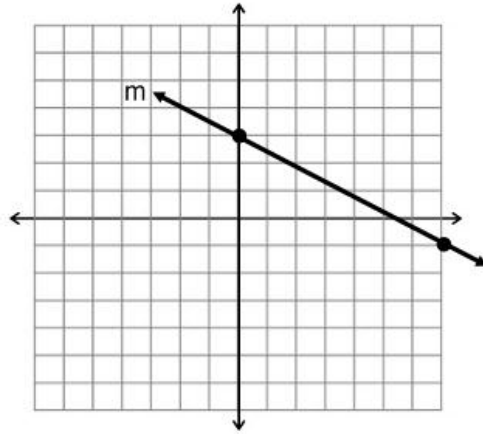
a. $y = -7/4x - 1/2$

b. $y = 7/4x - 1/2$

c. $y = 4/7x$

d. $y = 4/7x - 1/2$

___ 8. What is the slope of any line parallel to line m?



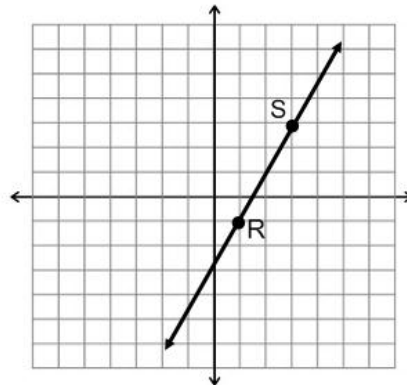
a. -2

b. $-\frac{4}{7}$

c. $\frac{1}{2}$

d. $-\frac{7}{4}$

___ 9. Which is an equation for the line that passes through (1,3) and is parallel to RS?



a. $y = 2x + 1$

b. $y = 2x + 2$

c. $y = 2x + 3$

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

___ **10.** Which point lies on the line that passes through (6, -3) and is parallel to the graph of the line $y = -1/3x + 12$?

a. (9, -2)

b. (-1/3, 3)

c. (3, -2)

d. (3, -12)

___ **11.** Which is an equation of a line that passes through (-3, 2) and is perpendicular to the graph of $y = 3x + 7$?

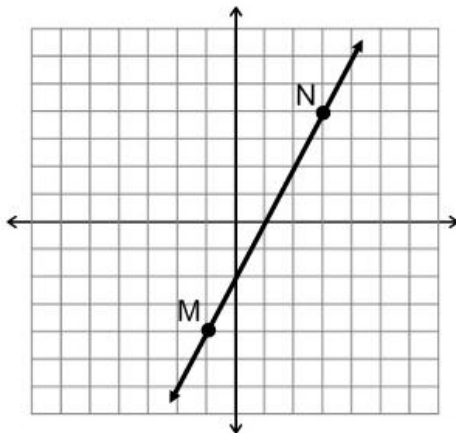
a. $y = -3x - 7$

b. $y = -1/3x + 1$

c. $y = -1/3x + 3$

d. $y = 1/3x + 3$

___ **12.** Which is an equation of a line perpendicular to MN?



a. $2x - y = 3$

b. $x - 2y = 2$

c. $x + 2y = 17$

d. $-2x + y = -3$

___ **13.** Line q passes through (6, 4) and is perpendicular to the graph of the line $y = -2/3x + 15$. Which is an equation of line q ?

a. $y = 3/2x - 1.6$

b. $y = 3/2x - 5$

c. $y = -3/2x - 5$

d. $y = -3/2x + 4$

___ **18.** What is the point-slope form of the linear equation with a graph that passes through $(-2, -4)$ and is perpendicular to the graph of the following linear equation?

$$y = 5x + 43$$

a. $y + 4 = 1/5(x + 2)$

b. $y + 4 = -1/5(x + 2)$

c. $y - 4 = -5(x - 2)$

d. $y - 4 = 5(x - 2)$

___ **19.** What is the slope-intercept form of the linear equation with a graph that passes through $(3, -5)$ and is perpendicular to the graph of the following equation?

$$-2x + 3y = 6$$

a. $y = -3/2x - 1/2$

b. $y = -2/3x - 3$

c. $y = 3/2x - 19/2$

d. $y = 2/3x - 7$

___ **20.** What is the slope-intercept form of the linear equation with a graph that passes through $(8,9)$ and is parallel to the graph of the following linear equation?

$$-7x + 4y = 16$$

a. $y = 7x - 47$

b. $y = 7x - 65$

c. $y = 7/4x - 5$

d. $y = 7/4x - 23$

EOC Linears Application Practice

Directions: Choose the best answer to each question. Write the letter for the answer you have chosen in the blank at the left of each question.

A 1. The equation of the graph of line n is $6x - 3y = 7$. Which could be the equation of a line m that is parallel to line n ?

a. $y = 3x - 1.6$

b. $y = -3x - 4$

c. $y = 1/3x - 4$

d. $y = 1/3x + 4$

B 2. What is the slope of a line parallel to a line that passes through the points at $(-2, 6)$ and $(3, 9)$.

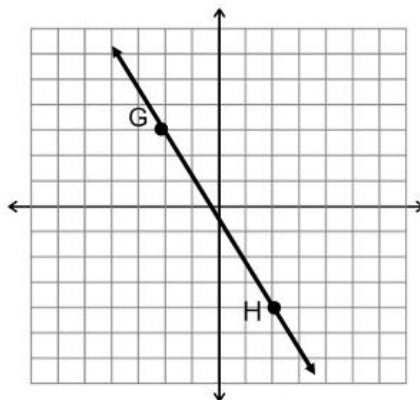
a. $1/3$

b. $3/5$

c. $5/3$

d. 3

D 3. Line m is the perpendicular bisector of \overline{GH} . What is the equation of line m ?



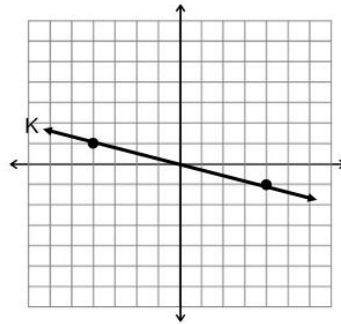
a. $y = -7/4x - 1/2$

b. $y = 7/4x - 1/2$

c. $y = 4/7x$

d. $y = 4/7x - 1/2$

C 4. Which point lies on the line that has a y-intercept of 1 and is perpendicular to line k ?



a. (-2, -8)

b. (-1, -4)

c. (1, 5)

d. (2, 10)

D 5. What is the slope of a line perpendicular to the line that passes through (-7,2) and (-2,0)?

a. -5/2

b. -2/5

c. 2/5

d. 5/2

D 6. Line a is parallel to line b and passes through (-3,2). If the equation of the graph of line b is $y = 3x + 10$, which is an equation of line a ?

a. $y = -3x - 7$

b. $y = -1/3x + 1$

c. $y = 3x + 7$

d. $y = 3x + 11$

A 7. Three of the vertices of parallelogram ABCD are A(2,7), B(4,4), and C(-2,-1). Given that opposite sides of a parallelogram are parallel, which is an equation of the line containing CD? (HINT: Draw it out!)

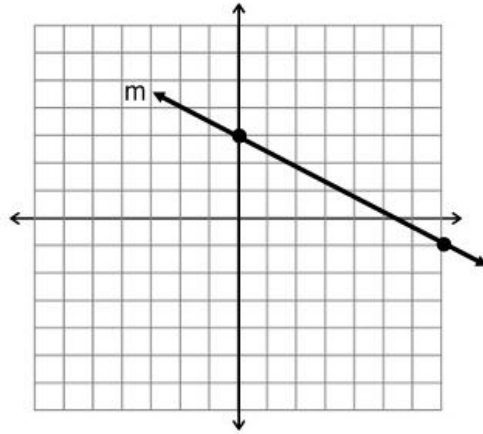
a. $y = -3/2x - 4$

b. $y = -3/2x - 2$

c. $y = 3/2x - 2$

d. $y = 2/3x + 1/3$

B 8. What is the slope of any line parallel to line m ?



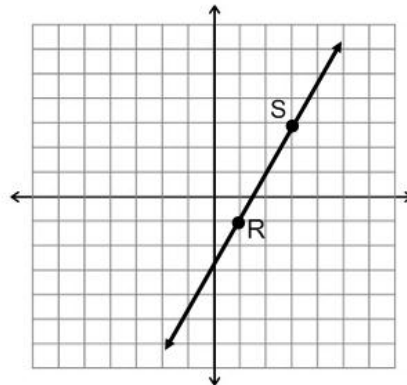
a. -2

b. $-1/2$

c. $1/2$

d. 2

A 9. Which is an equation for the line that passes through $(1,3)$ and is parallel to RS?



a. $y = 2x + 1$

b. $y = 2x + 2$

c. $y = 2x + 3$

d. $y = -1/2x + 5/2$

C 10. Which point lies on the line that passes through $(6, -3)$ and is parallel to the graph of the line $y = -1/3x + 12$?

a. $(9, -2)$

b. $(-1/3, 3)$

c. $(3, -2)$

d. $(3, -12)$

B 11. Which is an equation of a line that passes through $(-3, 2)$ and is perpendicular to the graph of $y = 3x + 7$?

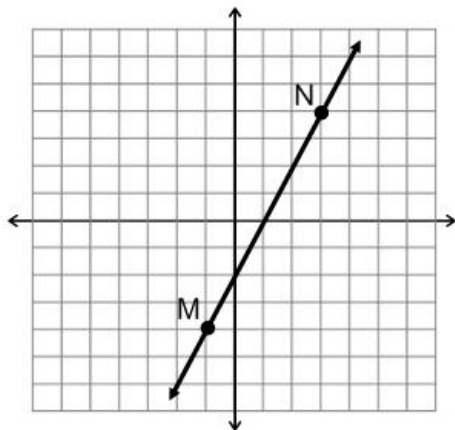
a. $y = -3x - 7$

b. $y = -1/3x + 1$

c. $y = -1/3x + 3$

d. $y = 1/3x + 3$

C 12. Which is an equation of a line perpendicular to MN ?



a. $2x - y = 3$

b. $x - 2y = 2$

c. $x + 2y = 17$

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B 13. Line q passes through $(6, 4)$ and is perpendicular to the graph of the line $y = -2/3x + 15$. Which is an equation of line q ?

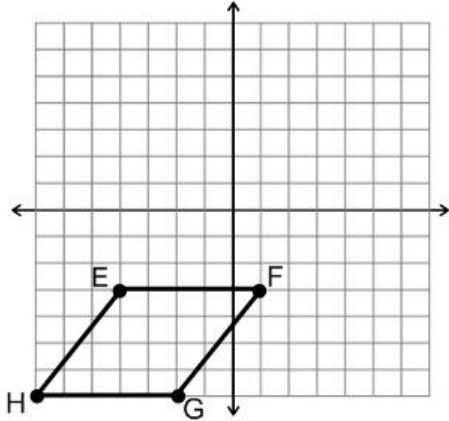
a. $y = 3/2x - 1.6$

b. $y = 3/2x - 5$

c. $y = -3/2x - 5$

d. $y = -3/2x + 4$

For #14 and #15, use the following graph.



D 14. What is the slope of a segment parallel to EH?

a. $-\frac{4}{3}$

b. $-\frac{3}{4}$

c. $\frac{3}{4}$

d. $\frac{4}{3}$

B 15. What is the slope of a segment that is perpendicular to FG?

a. $-\frac{4}{3}$

b. $-\frac{3}{4}$

c. $\frac{3}{4}$

d. $\frac{4}{3}$

A 16. What is the slope of a line that is perpendicular to $-7x + 42y = 16$?

a. -6

b. $-\frac{1}{6}$

c. $\frac{1}{6}$

d. 6

C 17. What is the point-slope form of the linear equation with a graph that passes through $(-1, 3)$ and is parallel to the graph of the following linear equation?

$$y = 3x - 2$$

a. $y - 3 = \frac{1}{3}(x + 1)$

b. $y + 3 = -\frac{1}{3}(x + 1)$

c. $y - 3 = 3(x + 1)$

d. $y + 3 = -3(x + 1)$

B 18. What is the point-slope form of the linear equation with a graph that passes through $(-2, -4)$ and is perpendicular to the graph of the following linear equation?

$$y = 5x + 43$$

a. $y + 4 = 1/5(x + 2)$

b. $y + 4 = -1/5(x + 2)$

c. $y - 4 = -5(x - 2)$

d. $y - 4 = 5(x - 2)$

A 19. What is the slope-intercept form of the linear equation with a graph that passes through $(3, -5)$ and is perpendicular to the graph of the following equation?

$$-2x + 3y = 6$$

a. $y = -3/2x - 1/2$

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C 20. What is the slope-intercept form of the linear equation with a graph that passes through $(8,9)$ and is parallel to the graph of the following linear equation?

$$-7x + 4y = 16$$

a. $y = 7x - 47$

b. $y = 7x - 65$

c. $y = 7/4x - 5$

d. $y = 7/4x - 23$

Student Answer Sheet

Name: _____

- 1.
- 2.
- 3.
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- 18.
- 19.
- 20.

Student Answer Sheet

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- 19.
- 20.

ANSWER KEY

Name: _____

1.A

11.B

2.B

12.C

3.D

13.B

4.C

14.D

5.D

15.B

6.D

16.A

7.A

17.C

8.B

18.B

9.A

19.A

10.C

20.C