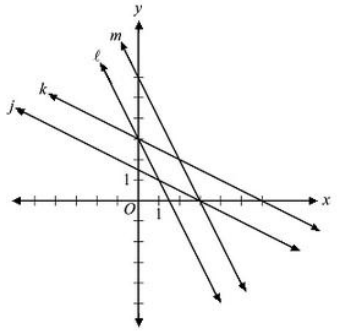
8.EE.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation y=mx for a line through the origin and the equation y=mx+b for a line intercepting the vertical axis at b.

Which line in the figure below has a slope of -2 and a y intercept of 3?



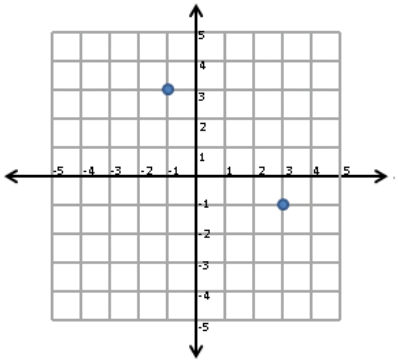
A) j
B) k
C) l
D) m

If a line contains the points in the table below, what is its equation?

x	y
−8	−42
−3	−17
0	−2
6	28

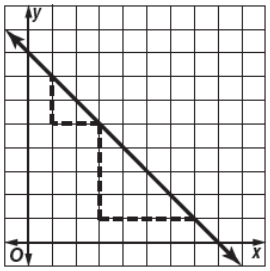
A $y = -2x + 5$
B $y = 2x - 5$
C $y = 5x - 2$
D $y = -5x - 2$

If a line passes through the two points below, what is its equation?



A) y = x + 2
B) y = -x + 2
C) y = 2x – 1
D) y = 2x + 1

Which of the following statements is NOT true concerning the graph below?



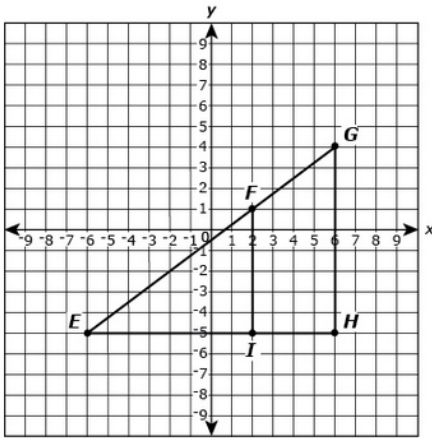
A) The simplified ratio of the vertical side length to the horizontal side length of each triangle is 1.

B) The slope of the line is 1

C) The slope of the line is -1

D) The smaller triangle and the larger triangle are similar.

Triangle EGH is graphed on a coordinate grid.



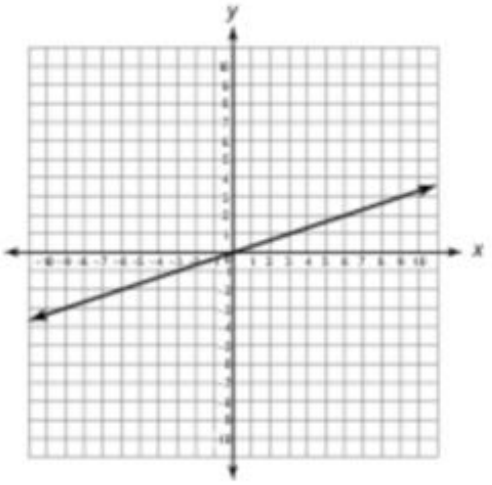
Part A: Use the Pythagorean Theorem to find the length of side $\overline{EF}$. Show your work.

Part B: What is the slope of the line containing $\overline{EF}$? What is the slope of the line containing $\overline{EG}$? Explain the relationship between the slopes of $\overline{EF}$ and $\overline{EG}$.

Part C: Write an equation to represent the line that passes through points E and G. If x=12, in the equation you wrote, what is the value of y? Show your work.

8.EE.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation y=mx for a line through the origin and the equation y=mx+b for a line intercepting the vertical axis at b.

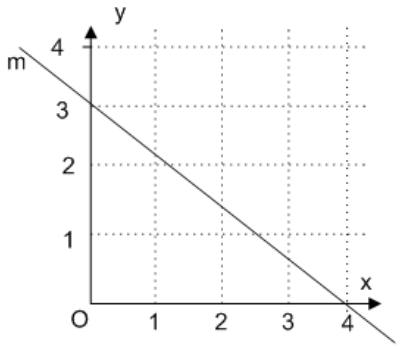
Tariq graphed a proportion on the plane below.



What are the equation and the y-intercept of the proportion?

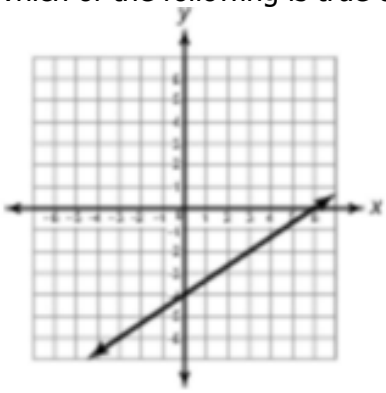
A. y = x; (0,3)
B. y = x+3; (0,3)
C. y = 1/3x; (0,0)
D. y = 1/3x; (0,1)

What is the equation of the line m shown in the coordinate plane below?



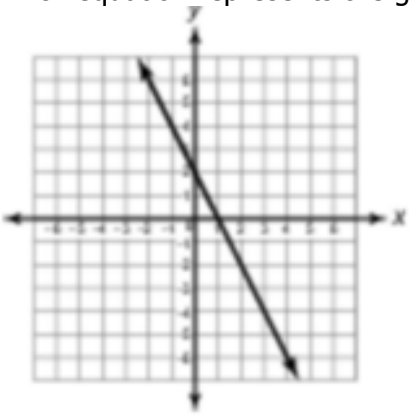
a. y = 3/4x – 3
b. y = -3/4x – 3
c. y = 3/4x + 3
d. y = -3/4x + 3

Which of the following is true of the graph?



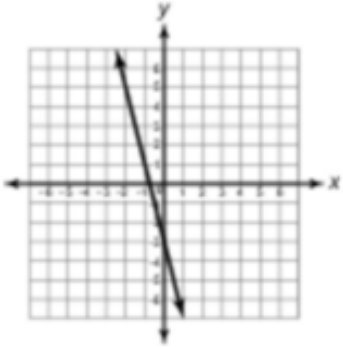
A. The slope of the graph is 3/2
B. The y-intercept of the graph is (0,6)
C. The equation of the graph is y = 2/3x-4
D. The graph has a negative slope

Which equation represents the graph?



A. y = 2x+2
B. y = -2x
C. y = -2x+2
D. y = -1/2x +2

Which of the following is true of the graph?



A. The slope of the graph is -4
B. The y-intercept of the graph is (0, -4)
C. The equation of the graph is y = -1/4x+3
D. The graph has a positive slope