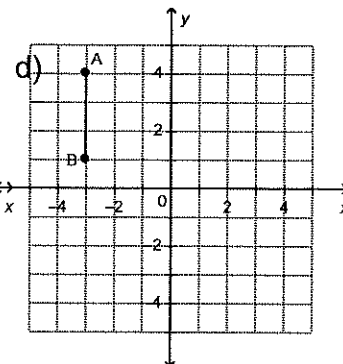
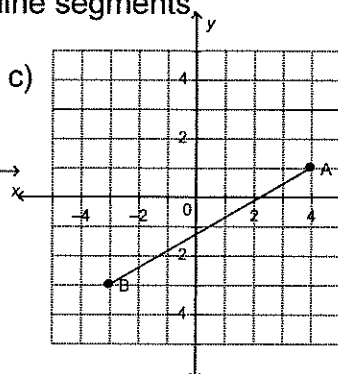
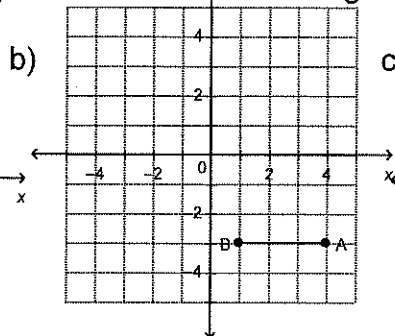
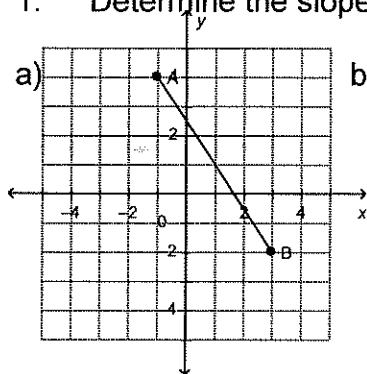


Leave slopes as fully simplified fractions where appropriate.

1. Determine the slope of each of the following line segments.



a) _____

b) _____

c) _____

d) _____

2. Determine the slope of the line passing through each of the following pairs of points.

a) A(3, 6) and B(7, 10)

b) C(2, -3) and D(-2, 5)

a) _____

b) _____

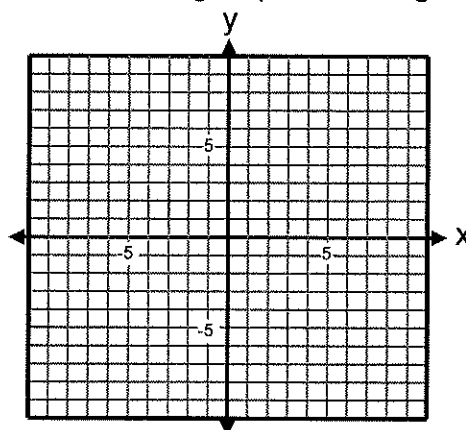
3. Draw and label line segments with each of the following slopes on the grid below.

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

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

c) 2

d) 0



4. The slope of AB is $-\frac{2}{3}$. Determine the slope of a line that is

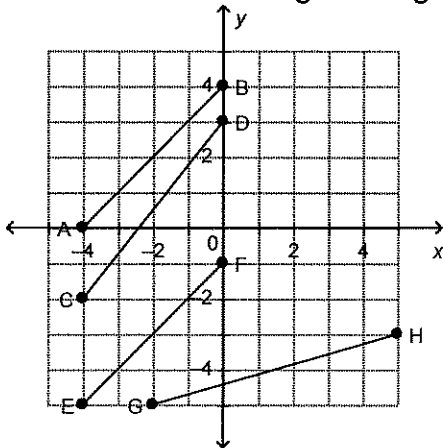
a) parallel to AB.

b) perpendicular to AB.

a) _____

b) _____

5. Which of the following line segments are parallel? What are their slopes?



Parallel: _____

Slopes:

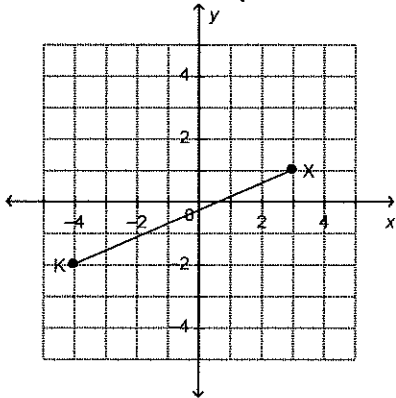
AB: _____

CD: _____

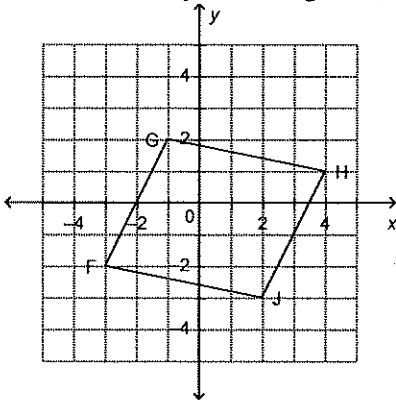
EF: _____

GH: _____

6. What is the slope of a line that is perpendicular to the line segment shown below?



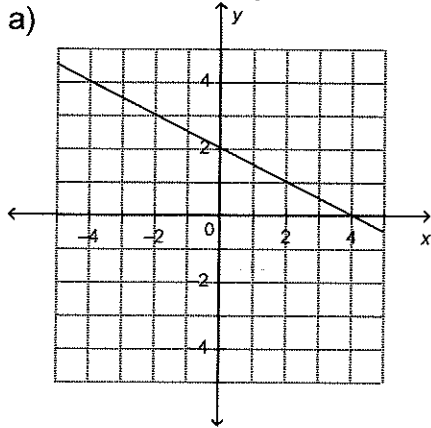
7. Is FGHI a parallelogram, a rectangle, or neither? Explain.



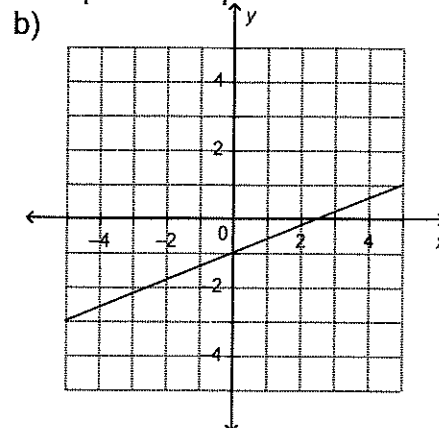
8. Line segment AB has endpoints $A(-4, -1)$ and $B(-1, 5)$. Line segment CD has endpoints $C(1, 1)$ and $D(5, -1)$. Are AB and CD parallel, perpendicular, or neither? Explain.

9. Write the equation of a line with a slope of -2 and a y -intercept of 5 .

10. Write the equation of each of the following lines in slope-intercept form.



a) _____

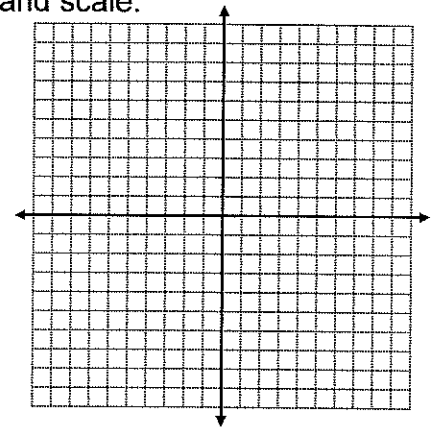


b) _____

11. Graph and label the following lines on the grid. Label axes and scale.

a) $y = -4x - 1$

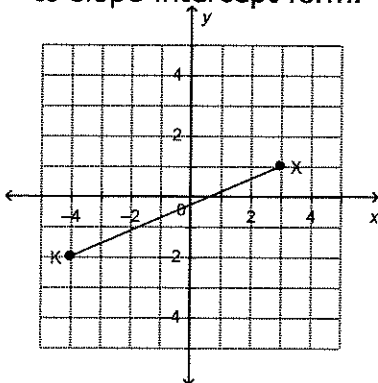
b) $y = \frac{3}{2}x + 2$



12. Describe the graph of the equation $y - 3 = \frac{2}{3}(x - 5)$

13. A line has a slope of $-3/4$ and passes through the point $(-2, 6)$. Write its equation in slope-point form.

14. Write the equation of the line shown below in slope-point form, then convert the equation to slope-intercept form.



15. Line AB is represented by the equation $y=2x + 5$.

a) Write the equation of a line that is parallel to AB and passes through the point (1, -3).
Answer in slope-point form.

b) Write the equation of a line that is perpendicular to AB and passes through the point (1, -3).
Answer in slope-intercept form.

16. Identify the form each equation is in, then change to general form.

a) $5x - 2y = 10$

b) $y + 1 = \frac{2}{5}(x - 3)$

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

17. Change this equation to slope-intercept form: $3x - 5y + 8 = 0$

18. Calculate the x and y-intercepts, then graph the line $2x - 3y + 12 = 0$

