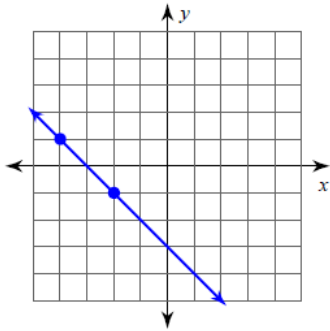


Formulas

Slope: $m = \frac{y_2 - y_1}{x_2 - x_1}$

Point-Slope Form: $y - y_1 = m(x - x_1)$

1) Find the slope from the graph.

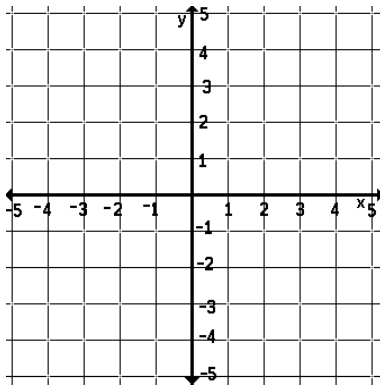


2) Find the slope using two points.

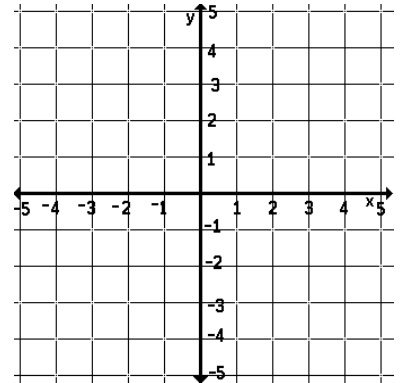
$(-2, 6), (8, 8)$

Graph each equation.

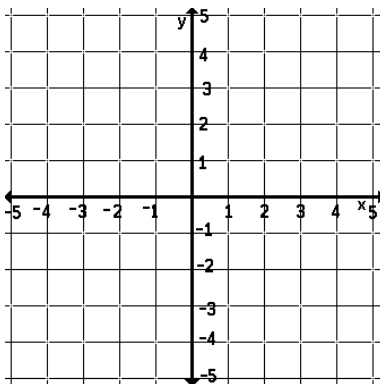
3) $y = \frac{1}{2}x - 4$



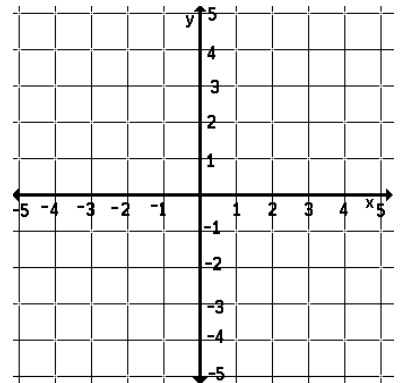
4) $4x + 3y = 6$



5) $x = 4$



6) $y = -3$



Write the equation of the line in slope-intercept form given a point and the slope.

7) $(5, -2), m = 2$

8) $(-6, 9), m = \frac{1}{3}$

Write the equation of the line in slope-intercept form given only two points. Find the slope first!

9) $(2, -5), (7, 0)$

10) $(4, -3), (6, -7)$

Find the common difference for each arithmetic sequence. Then, find the next 3 terms.

11) $6, 4, 2, 0, \underline{\hspace{2cm}}$

12) $\frac{1}{3}, \frac{2}{3}, 1, \frac{4}{3}, \underline{\hspace{2cm}}$

Find the common ratio for each geometric sequence. Then, find the next 3 terms.

13) $3000, 300, 30, 3, \underline{\hspace{2cm}}$

14) $7, -21, 63, -189, \underline{\hspace{2cm}}$

Determine whether each sequence is arithmetic, geometric, or neither. You can write A, G, or N. Then, write the next 3 terms.

15) $-101, -112, -123, -134, \underline{\hspace{2cm}}$

16) $2, -2, 2, -2, \underline{\hspace{2cm}}$

17) $1, -4, 9, -16, \underline{\hspace{2cm}}$

18) $1, 12, 123, 1234, \underline{\hspace{2cm}}$