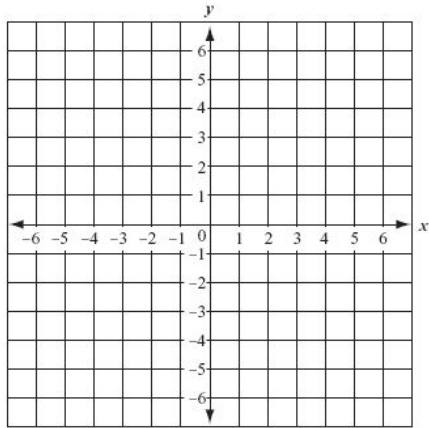


Answer each question, making sure to show your work in the space provided.

Take the time to check your work. Write neatly. Circle your final answer.

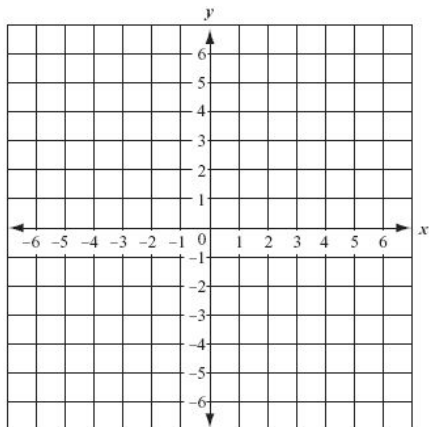
- 1.** Graph.

$$f(x) = -3x + 4$$



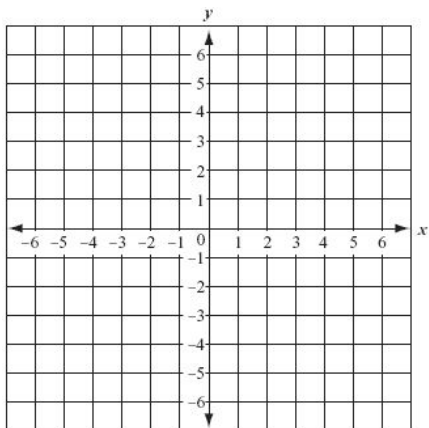
- 2.** Graph.

$$5y - 4x = -15$$



- 3.** Graph.

$$y = -2$$



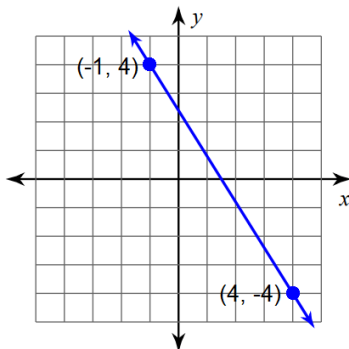
- 4.** Write the equation $3x - 2y = 4$ in slope-intercept form.

- 5.** Find the slope of the line passing through the points $(5, -9)$ and $(3, 7)$.

- 6.** Find the slope of the line passing through the points $(-2, -7)$ and $(-5, -7)$.

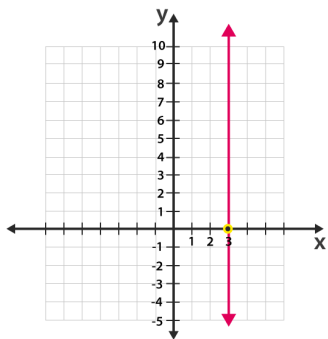
- 7.** What is the value of x for the line that has a slope of $-\frac{1}{5}$ and passes through the points $(x, 3)$ and $(7, 5)$?

8. What is the slope of the line shown below?



$m =$ _____

9. What is the slope of the line shown below?



$m =$ _____

10. A local gym has a one-time sign-up fee of \$30. After that, the membership costs \$20 per month.

- A) Write an equation in slope intercept form for the total cost (C) after m months of membership.
- B) Using your equation, what would be the total cost to be a member for 2 years (24 months)?

11. Find the slope and y-intercept of the line with the equation $4x + 3y = -9$.

slope: _____ y-intercept: _____

12. Identify which of these sequences are arithmetic.

Select all that apply.

- a) 28.25, 22.5, 16.75, 11, ...
- b) 3, 6, 12, 24, 48, ...
- c) 20, 17, 14, 11, 8, ...
- d) 1, 4, 9, 16, 25, ...
- e) -3, -1, 0, 1, 3, ...
- f) 1, -3, 5, -7, 9, ...

13. Given the arithmetic sequence: **7, 13, 19, 25, ...**

- A) Write an explicit formula (equation) for the n th term (a_n) of this sequence.
- B) Using your formula, find the 43rd term (a_{43}) of the sequence.