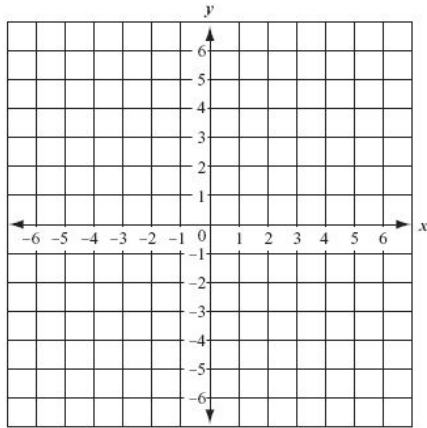


Answer each question, making sure to show your work in the space provided.

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

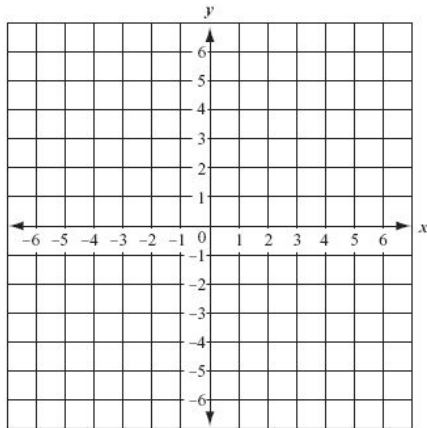
1. Graph.

$$f(x) = \frac{2}{3}x - 6$$



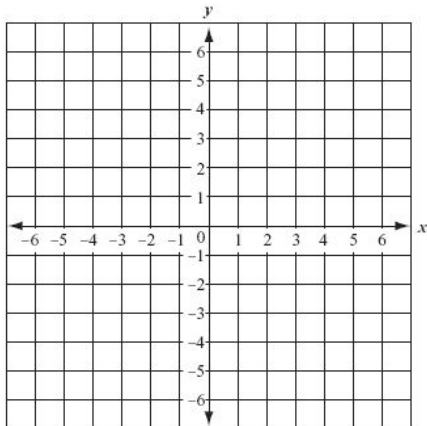
2. Graph.

$$-4x + 3y = -9$$



3. Graph.

$$x = 5$$



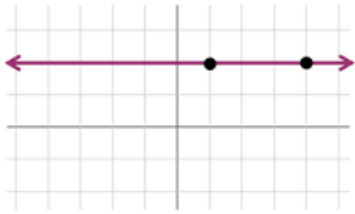
4. Write the equation $8x - 2y = 14$ in slope-intercept form.

5. Find the slope of the line passing through the points $(2, -3)$ and $(6, 7)$.

6. Find the slope of the line passing through the points $(-1, 4)$ and $(-1, -8)$.

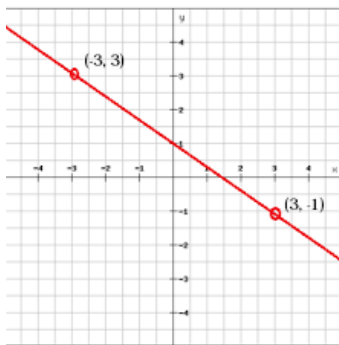
7. What is the value of y for the line that has a slope of -3 and passes through the points $(6, y)$ and $(2, 5)$?

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



$m =$ _____

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



$m =$ _____

10. Janie deposits \$250 per month into a savings account. When she opened the account, she began with \$720.
- A) Write an equation in slope intercept form for the total balance (B) m months after the account was opened.
- B) Using your equation, what would be the account balance after three years (36 months)?

11. Find the slope and y-intercept of the line with the equation $2x + 3y = 12$.

slope: _____ y-intercept: _____

12. Identify which of these sequences are arithmetic. **Select all that apply.**

- a) $2\frac{3}{4}, 3\frac{1}{2}, 4\frac{1}{4}, 5, \dots$
- b) $5, 10, 15, 20, 30, \dots$
- c) $34, 31, 28, 25, 22, \dots$
- d) $3, 6, 12, 24, 48, \dots$
- e) $0.01, 0.1, 1, 10, 100, \dots$
- f) $1, 2, 4, 7, 11, \dots$

13. Given the arithmetic sequence: **6, 15, 24, 33, ...**

- A) Write an explicit formula (equation) for the n th term (a_n) of this sequence.
- B) Using your formula, find the 108th term (a_{108}) of the sequence.