1. Find the slope of the line that passes through the points $(3, -2)$ and $(-4, 5)$.

2. Is $(-2, 5)$ a solution to $3x - y = 7$?

3. Solve for $x$: $-(x + 16) = 2(x + 1)$.


5. A car rental agency offers two rental plans. With Plan 1, the customer pays $20.00 per day plus $0.10 per mile. With Plan 2, the customer pays $40.00 per day plus $0.05 per mile. How many miles must be driven to make the daily cost of Plan 2 the better deal?

6. Solve for $x$: $-9 \leq 6 - 3x < -3$. Express the answer in interval notation.

7. Find the slope and $y$-intercept of $6x - 2y = 11$.

8. Find the equation of a line parallel to $3x + y = 5$ that passes through the point $(-2, -2)$.

9. Solve $a - b(x - y) = c$ for $x$.

10. What is the $y$-intercept of the horizontal line that passes through $(-3, -7)$?

11. What is the domain, in interval notation of $f(x) = \sqrt{6 - 7x}$?

12. Solve and graph: $2x - 11 \geq -9$ or $x < 8 - x$.

13. A lawyer charges a consultation fee of $125.00 plus $50.00 for every 30 minutes spent working for a client. Write the equation (you do not have to solve) that represents the charges to the client for $x$ hours of work.

14. If $g(x) = 2x^2 - 1$, what is $g(5)$?

15. Solve for $x$: $|x - 14| \leq 3$.

16. Is the following relation a function? $(-1, 8), (3, 2), (5, -1), (8, 200), (16, -1)$.

17. The relationship between the number of pages read, $P$, and the number of hours, $h$, spent reading is linear. If someone reads 92 pages in 4 hours one day and 23 pages in one hour the next day, how long will it take to read 108 pages?
18. Consider the graph of \( y = f(x) \) below. Are the following statements true or false?

![Graph of \( y = f(x) \)](image)

a. The \( y \)-intercept is at \((2,0)\).

b. The \( x \)-intercept is at \((-2,0)\).

c. The slope of the line is negative.

d. The slope of the line is 2.

e. \( f(1) = 3 \).

f. The graph represents a function.

g. \( f(-3) = 1 \).

19. What is the equation of the line shown in the graph above?

20. The profit from a sale of tickets to an event is represented by \( P(t) = 25t - 2.4 \). What does the slope of this equation represent?

21. Solve for \( x \) and write the solution in interval notation: \( \frac{1}{6} (6x + 2) - 25 < -\frac{1}{4} (8x - 4) \).