



**Unit 7:
Cumulative Review**

1. Simplify $3(5 - 17)/2 - 1$.

2. Simplify $3/8 - 5/11 + 2$.

3. Simplify $|5 - 8|(5 - 8)/(-2)$.

4. Evaluate $(3x - 2y + 9)x$ when $x = 5$
and $y = -1$.

5. Solve $8(x + 1) - (2 + x) = 4x + 1$.

6. Present the solution to $4x + 2 < 6x - 20$ both algebraically and graphically.

7. Use unit multipliers to convert 36 miles to meters.

8. 8 is what percent of 300?

9. What is the slope of a line passing through (5, -8) and (-2, -18)?

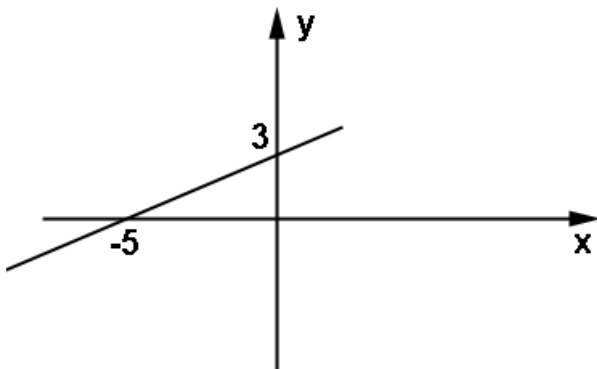
10. If the base of a triangle is 8 more than either of the other two equal sides, how long is the base if the perimeter of the triangle is 98?

11. What is the range of $f(x) = 11x - 12$ when its domain is $\{-8, -2, 0, 6, 10\}$?

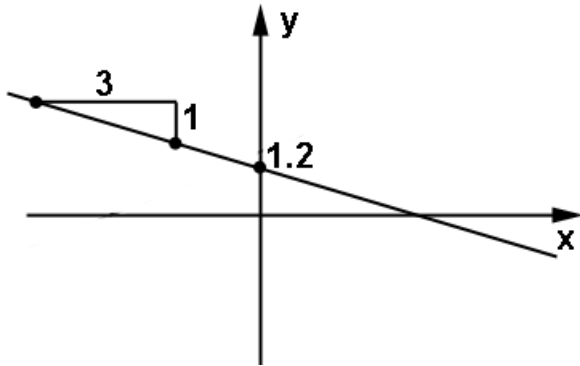
12. What is the equation of a line parallel to the x-axis and passing through $(5, 8)$?

13. What is the equation of a line parallel to the y-axis and passing through $(5, 8)$?

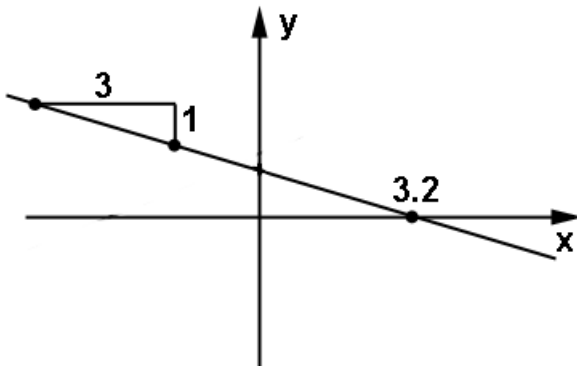
14. What is the equation of the line shown here?



15. What is the equation of the line shown here?



16. What is the equation of the line shown here?



17. Which of the following sets of ordered pairs are **not** functions?

- A. $\{(4, 22), (9, -6), (-4, 22), (1, 1)\}$
- B. $\{(-1, 6), (1, 6), (6, -6), (-1, 1)\}$
- C. $\{(2, 7), (7, 7), (5, 7), (-2, 7), (8, 7)\}$
- D. $\{(4, 5), (4, 6), (4, 7), (4, 8)\}$