

1. Solve using the addition principle: $8 = a + 5$.
2. Solve using the multiplication principle: $-5b = 65$.
3. Solve using the addition principle: $x + \frac{7}{11} = \frac{10}{11}$.
4. Solve using the addition principle: $3m - 3 = 19$.
5. Solve the equation: $\frac{2x}{5} - \frac{x}{3} = 3$.
6. Solve the equation: $\frac{f}{4} - 4 = 1$.
7. Solve the equation: $-4.7y + 1.6 = -39.2 - 1.3y$.
8. Solve the equation: $12 - 2(3x - 4) = 38$.
9. Solve the equation: $(y - 7) - (y + 5) = 6y$.
10. Solve for W : $P = 2L + 2W$.
11. The area of a triangle with base b and height h is given by the formula $A = \frac{1}{2}bh$. Find the height of the triangle with base 5 meters and area 20 square meters.
12. Solve: 48% of what number is 75?
13. Solve: 27 is what percent of 72?
14. Use algebra to solve the following.
 A triangular lake-front lot has a perimeter of 560 feet. One side is 60 feet longer than the shortest side, while the third side is 110 feet longer than the shortest side. Find the lengths of all three sides.
 Let $x =$ _____
 Equation to solve: _____
 The lengths of the three sides: _____, _____, _____
15. Use algebra to solve the following.
 Find the length of a rectangular lot with a perimeter of 70 meters if the length is 5 meters more than the width.
 Let $x =$ _____
 Equation to solve: _____
 Length = _____, Width = _____
16. Solve the inequality $6 + 6y \geq 48$. Give the answer in interval notation **and** sketch the solution on a number line.

17. Solve $4z + 3 \leq 6z - 5$.

18. Solve using an inequality:

Jon has 646 points in his math class. He must have 60% of the 1300 points possible by the end of the term to receive credit for the class. What is the minimum number of additional points he must earn by the end of the term to receive credit for the class?

19. Use algebra to solve the following.

The sum of three consecutive even integers is 228. What are the integers

Let $x =$ _____

Equation to solve: _____

The three integers are _____

20. Solve $\frac{3(t-7)}{2} = t - 6$.