SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Solve the equation.
1) \( a - 4 = 19 \) 
2) \( -5.1 = 18.3 - x \) 
3) \( 45 = -9k \) 
4) \( -\frac{1}{3}x = 11 \) 
5) \( -6 + 8p = -5 \) 
6) \( 5 - \frac{t}{3} = 8 \) 

Solve the equation. Round the solution to the nearest tenth.
7) \( -2.3 = 7.43v \) 

Use an equation to solve the problem.
8) Elaine had 22 buttons and her grandmother donated 8 cards of buttons to the collection. Elaine sorted the buttons into 7 piles, putting 10 buttons in each pile. How many buttons were on each card from Elaine's grandmother? 

9) Junior high classes of 25 students each met in the cafeteria to take achievement tests. If exactly 5 students sat at each table and 15 tables were used, how many classes took the tests? 

Combine like terms.
10) \( -9z - (-4z) \) 

Solve.
11) \( 6x + 6 = 2x + 42 \) 
12) \( 9z - 6 - 5z = -46 \) 

Solve the equation.
13) \( 9p = 8(8p + 3) \) 
14) \( 3 - 5(5t - 18) = -82 \)
Solve the equation. Round the solution to the nearest tenth.
15) \(12.9z + 3.74z = 0.969\)  
16) \(6.67t + 3.03(1 - t) = 2.82\)

Use an equation to solve the problem.
17) A rectangle has a perimeter of 120 feet. The width is 4 times the length. What is the length of the rectangle?
18) The sum of a number and 2 times that number is 18. What is the number?

Translate the stated rule or relationship to a formula.
19) The cost, \(C\), of renting a car is $67 plus $9.7 times the number of miles driven, \(x\).
20) The volume, \(V\), of a rectangular box is equal to the product of the length, \(l\), of the box; the width, \(w\), of the box; and the height, \(h\), of the box.

A formula is given, along with values for all but one of the variables in the formula. Find the value of the variable that is not given.
21) \(P = 2L + 2W; L = 2, W = 7\)
22) \(V = \frac{1}{3}Bh; B = 27, h = 8\)
23) \(A = \pi r^2; r = 7, \pi = 3.14\)

Solve the problem.
24) The formula for finding the present value of an item that depreciates yearly is \(v = c - crt\). In this formula, \(v\) is the present value, \(c\) is the original cost, \(r\) is the rate of depreciation per year, and \(t\) is the number of years that have passed. After 7 years, what is the value of a car originally costing $35,000 that depreciated at a rate of 0.1 per year?
25) The markup on an item is its selling price, \(s\), minus its cost, \(c\). If a new printer costs $292.25 and it sells for $406.99, what is the markup?