

Key

- 1) A plumb bob and a Gammon reel cost, together, \$23.00. If the Gammon reel costs \$13.00 less than the plumb bob, find the cost of each.
- $$x + (x + 13) = 23$$
- $$x = \text{Gammon Reel} = \underline{\$5}$$
- $$x + 13 = \text{Plumb Bob} = \underline{\$18}$$
- 2) Nick, Fred and Tom are all working for a survey company. Nick earns 2 times as much as Fred, and Tom earns 3 times as much as Nick. If the total amount earned by all is \$900, how much does each man get?
- $$2x + x + 3(2x) = 900$$
- $$2x = \text{Nick} = \underline{\$200}$$
- $$x = \text{Fred} = \underline{\$100}$$
- $$3(2x) = \text{Tom} = \underline{\$600}$$
- 3) An architect's drawing has a stated scale of $\frac{3}{16}'' = 1'$. If the length of a parking lot is to be 252 feet on the ground, how long will it be (in inches) on his drawing?
- $$\frac{\frac{3}{16}}{1} = \frac{x}{252}$$
- $$x = \underline{47.25 \text{ inches}}$$
- 4) Find 4 consecutive odd numbers whose sum is 88.
- $$x + (x + 2) + (x + 4) + (x + 6) = 88$$
- $$x = 1^{\text{st}} \text{ number}$$
- $$\underline{19, 21, 23, 25}$$
- 5) Three students together earned \$1200. The first earned twice as much as the second, and the third earned \$200 less than twice as much as the first. How much did each student earn?
- $$2x + x + [2(2x) - 200] = 1200$$
- $$2x = 1^{\text{st}} = \underline{\$400}$$
- $$x = 2^{\text{nd}} = \underline{\$200}$$
- $$2(2x) - 200 = 3^{\text{rd}} = \underline{\$600}$$
- 6) If 3 lbs. of hamburger cost \$3.87, what is the cost of 5 lbs.?
- $$\frac{3}{3.87} = \frac{5}{x}$$
- $$x = \underline{\$6.45}$$
- 7) A wildlife management team, conducting a study of a particular lake, caught, tagged and released 75 Black Bass. Several weeks later they caught 125 Black Bass and observed that 3 of them were tagged. What is the total number of Black Bass they could expect to be present in the lake?
- $$\frac{3}{75} = \frac{125}{x}$$
- $$x = \underline{3,125 \text{ Black Bass}}$$
- 8) The difference between a number and one-quarter of that same number is 51. Find the two numbers.
- $$x - \frac{x}{4} = 51$$
- $$x = \underline{68}$$
- $$x/4 = \underline{17}$$
- 9) If one Gunther's chain is equal to 66.00 feet, how many feet are there in 80 Gunther's chains?
- $$\frac{1}{66} = \frac{80}{x}$$
- $$x = \underline{5280 \text{ ft.}}$$
- 10) On a road map two cities are 4 inches apart and the distance between them is 280 miles. What is the distance (in miles) between two cities that are $2\frac{3}{4}''$ apart?
- $$\frac{4}{280} = \frac{2.75}{x}$$
- $$x = \underline{192.5 \text{ mi.}}$$