

Review Exercise Set 12

Exercise 1: The sum of a number and eleven is twenty-four. Find the number.

Exercise 2: The total of a number divided by three and five is eight. Find the number.

Exercise 3: The difference between seven and one-third of a number is one. Find the number.

Exercise 4: The sales price of a SUV this year is \$18,000, which is five-sixths of its sales price last year. Find last year's sales price for the SUV.

Exercise 5: A sales representative was paid \$2,900 for this month. This amount included their base salary of \$700 plus a commission of 4% on their total sales for this month. Find the sales representative's total sales for this month.

Review Exercise Set 12 Answer Key

Exercise 1: The sum of a number and eleven is twenty-four. Find the number.

$$x = \text{a number}$$

$$x + 11 = 24$$

$$x + 11 - 11 = 24 - 11$$

$$\mathbf{x = 13}$$

Exercise 2: The total of a number divided by three and five is eight. Find the number.

$$x = \text{a number}$$

$$(x \div 3) + 5 = 8$$

$$(x \div 3) + 5 - 5 = 8 - 5$$

$$(x \div 3) = 3$$

$$3 * (x \div 3) = 3 * 3$$

$$\mathbf{x = 9}$$

Exercise 3: The difference between seven and one-third of a number is one. Find the number.

$$x = \text{a number}$$

$$7 - \frac{1}{3}x = 1$$

$$7 - 7 - \frac{1}{3}x = 1 - 7$$

$$-\frac{1}{3}x = -6$$

$$-3 \times \left(-\frac{1}{3}x \right) = -3 \times (-6)$$

$$\mathbf{x = 18}$$

Exercise 4: The sales price of a SUV this year is \$18,000, which is five-sixths of its sales price last year. Find last year's sales price for the SUV.

x = last year's price

$$18000 = \frac{5}{6}x$$

$$6 \times 18000 = 6 \times \frac{5}{6}x$$

$$108000 = 5x$$

$$108000 \div 5 = 5x \div 5$$

$$21,600 = x$$

Last year's price for the SUV was \$21,600.

Exercise 5: A sales representative was paid \$2,900 for this month. This amount included their base salary of \$700 plus a commission of 4% on their total sales for this month. Find the sales representative's total sales for this month.

x = total sales for this month

$$2900 = 700 + 4\% * x$$

$$2900 = 700 + 0.04x$$

$$2900 - 700 = 700 - 700 + 0.04x$$

$$2200 = 0.04x$$

$$2200 \div 0.04 = 0.04x \div 0.04$$

$$55,000 = x$$

The total sales for this month were \$55,000.