

Two-Step Equation Word Problems



Write and solve an equation for each problem.

- 1 Carla is a waitress at Daybreak Diner, and she earns \$5 for each hour she works. Last week, she earned \$148 total, including \$68 in tips. How many hours did Carla work last week?

$$5x + 68 = 148$$

$$x = 16$$

Carla worked 16 hours.

- 2 Mr. Olin bought 6 sketchbooks for the students in his art class. Each sketchbook was on sale for \$3 off. If the sketchbooks cost \$18 total before tax, what was the original price of each sketchbook?

$$6(x - 3) = 18$$

$$x = 6$$

The original price of each sketchbook was \$6.

- 3 Davion wants to buy 4 tickets to a basketball game. He sees that there is a discount for \$25 off his entire purchase at checkout, so the tickets would cost him \$215 before tax. What was the original price of each ticket?

$$4x - 25 = 215$$

$$x = 60$$

The original price of each ticket was \$60.

- 4 Elana makes knit hats and scarves and sells them in her online store for \$12 each. Last week, Elana's store made \$180 total. If she sold 8 hats, how many scarves did she sell?

$$12(x + 8) = 180$$

$$x = 7$$

Elana sold 7 scarves.

- 5 Tiana bought 3 video games that each cost the same amount. The tax on each video game was \$1.29. She paid a total of \$68.37 after tax. What was the price of each video game, before tax?

$$3(x + 1.29) = 68.37$$

$$x = 21.50$$

The price of each video game before tax was \$21.50.

- 6 The local pool near Paxton's house charges a one-time registration fee of \$18.25 and \$17.50 per month. Last year, Paxton paid \$105.75. How many months was Paxton a member of the pool?

$$18.25 + 17.50x = 105.75$$

$$x = 5$$

Paxton was a member of the pool for 5 months.