

Calculating commission

In this lesson we'll learn how to calculate the commission earned.

What is commission? Commission is the amount of money a salesperson earns on the sale of an item.

The formula for commission:

$$\text{Commission} = \text{Selling Price} \cdot \text{Percent Commission}$$

Let's look at a couple of examples.

Example

A wax warmer business advertises that we can make 25 % commission on sales of their product. If we make \$2,500.00 in sales, how much money will we earn?

To find the commission, we multiply the selling price by the percent commission.

$$25 \% \text{ of } \$2,500.00$$

$$\$2,500.00 \cdot 0.25$$

$$\$625$$

We'll earn \$625 for selling \$2,500.00 worth of product.



People who sell clothes often work on commission plus an hourly salary.

Example

An employee at a clothing store earned \$450.25 in hourly pay for the month. He also sold \$3,500.00 worth of merchandise and expects to earn a commission of 8 % on those sales. What is the employee's total expected pay before tax deductions?

First find the amount he earned in commissions.

$$8 \% \text{ of } \$3,500.00$$

$$\$3,500.00 \cdot 0.08$$

$$\$280.00$$

Now calculate the employee's total expected pay.

$$\$450.25 + \$280.00$$

$$\$730.25$$

The employee expects to be paid a total of \$730.25.

People who sell cars often earn a yearly salary and commissions on sales.



Example

Stephanie earns \$42,000.00 per year plus a commission of 15 % on all the cars she sells. If she wants to earn a total of \$67,200.00, how much money in car sales does she need to make?

We know that the amount she wants to earn in commissions is

$$\$67,200.00 - \$42,000.00$$

$$\$25,200.00$$

Then

$$\$25,200.00 = 15 \% \text{ of } x$$

where x is the amount of money she needs to make in car sales.

$$\$25,200.00 = 0.15x$$

$$\frac{25,200.00}{0.15} = x$$

$$\$168,000 = x$$

This means that to earn a salary of \$67,200.00, Stephanie needs to sell \$168,000.00 worth of cars.



Real estate agents often make all their money on only commission. For example, when they help a client sell a house, they earn a commission (as a percentage of the sale price) on the sale.

Example

A real estate agent is working with multiple clients. In March, he helps his first client sell a house for \$315,000 and earns 3 % commission, he helps a second client sell a house for \$225,000 and earns 4 % commission, and he helps a third client sell a house for \$410,000 and earns 6 % commission. How much commission did the agent earn in total in March?

First, calculate the commission on each sale individually.

$$\text{First client:} \quad \$315,000 \cdot 3 \% = 315,000 \cdot 0.03 = \$9,450$$

$$\text{Second client:} \quad \$225,000 \cdot 4 \% = 225,000 \cdot 0.04 = \$9,000$$

$$\text{Third client:} \quad \$410,000 \cdot 6 \% = 410,000 \cdot 0.06 = \$24,600$$

Then add the commission amounts to find the agent's total commission in March.

$$\$9,450 + \$9,000 + \$24,600$$

$$\$18,450 + \$24,600$$

$$\$43,050$$

