

Percentages and Money: Calculating the Amount of a Discount

Percentages are used all the time when we are working with money. Often when we calculate percentages with money, we look for the amount of a percentage when using a purchase price. *We can call this the **percent** of a number.*

How can we calculate the percent of a number?

Let's begin by looking at an example. Then we can apply this information to working with money.

Example: **What is 32% of 25?**

To calculate this number, we are looking for a part of 25. We actually want to specifically find 32% of 25.

To do this, we can use our key words to help us.

One key word is the word "of" - the word "of" means to multiply. What is- means an unknown and then an equal sign.

Here is the first part of the equation that we are going to write.

$x =$

This is the first part of the problem the "what is" part.

Next, we work with the 32% of 25.

If "of" means multiply then we have the next part of the equation.

$x = (32\%)(25)$ $x = (32\%)(25)$

32% is difficult to multiply in this form. We need to convert the percent to a decimal.

Do you remember how to convert percentages to decimals?

We can do this by dropping the % sign and moving a decimal in two decimal places from right to left. % means “per hundred” so we move the decimal in two places to represent the hundredths place.

$$32\% = .32$$

Now we can substitute this into our equation and solve.

Example

$$x = (.32)(25)$$

$$x = 8$$

How can we apply this to money?

If you think about working with money, let’s say we have a discount of 15%.

If the price of an item is \$35.00, what is the amount of money off with a 15% discount?

We could say, what is 15% of \$35.00?

Let’s rewrite the problem into an equation.

Example:

$$x = .15(35)$$

$$x = 5.25$$

This means that we would take \$5.25 off of the total price. This is the amount of the discount.

You can figure out the discount of any amount of money by using this equation and the percent. *This is the amount of the discount -- not the sales price.*

Name _____



Date _____

Calculating the Amount of a Discount Worksheet

Directions: Use what you have learned to calculate the amount of each discount.

1. What is 10% of \$15.00?
2. What is 25% of \$12.00?
3. What is 20% of \$67.00?
4. What is 18% of \$21.00?
5. What is 25% of \$87.00?
6. What is 15% of \$125.00?
7. What is 20% of \$55.50?
8. What is 12% of \$133.25?
9. What is 30% of \$295.00?
10. What is 50% of \$18.50?
11. What is 75% of \$36.00?
12. What is 80% of \$345.90?

Name _____



Date _____

Answer Key

1. \$1.50
2. \$3.00
3. \$13.40
4. \$3.78
5. \$21.75
6. \$18.75
7. \$11.10
8. \$15.99
9. \$88.50
10. \$9.25
11. \$27.00
12. \$276.72