

Lesson 10: What Are Percentages?

Let's learn about percentages.

10.1: Dollars and Cents

Find each answer mentally.

1. A sticker costs 25 cents. How many dollars is that?
2. A pen costs 1.50 dollars. How many cents is that?
3. How many cents are in one dollar?
4. How many dollars are in one cent?

10.2: Coins

1. Complete the table to show the values of these U.S. coins.



coin	penny	nickel	dime	quarter	half dollar	dollar
value (cents)						

The value of a quarter is 25% of the value of a dollar because there are 25 cents for every 100 cents.

1 Quarter

1 Dollar

2. Write the name of the coin that matches each expression.

- | | |
|---------------------------------------|--|
| <input type="radio"/> 25% of a dollar | <input type="radio"/> 100% of a dollar |
| <input type="radio"/> 5% of a dollar | <input type="radio"/> 10% of a dollar |
| <input type="radio"/> 1% of a dollar | <input type="radio"/> 50% of a dollar |

3. The value of 6 dimes is what **percent** of the value of a dollar?

4. The value of 6 quarters is what percent of the value of a dollar?

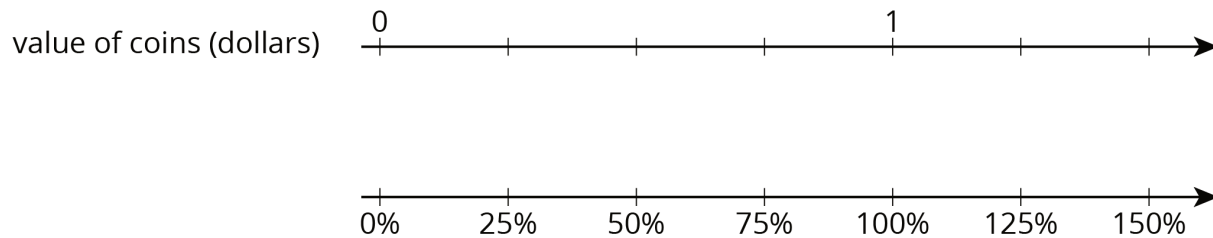
Are you ready for more?

Find two different sets of coins that each make 120% of a dollar, where no type of coin is in both sets.

10.3: Coins on a Number Line



A \$1 coin is worth 100% of the value of a dollar. Here is a double number line that shows this.



1. The coins in Jada's pocket are worth 75% of a dollar. How much are they worth (in dollars)?

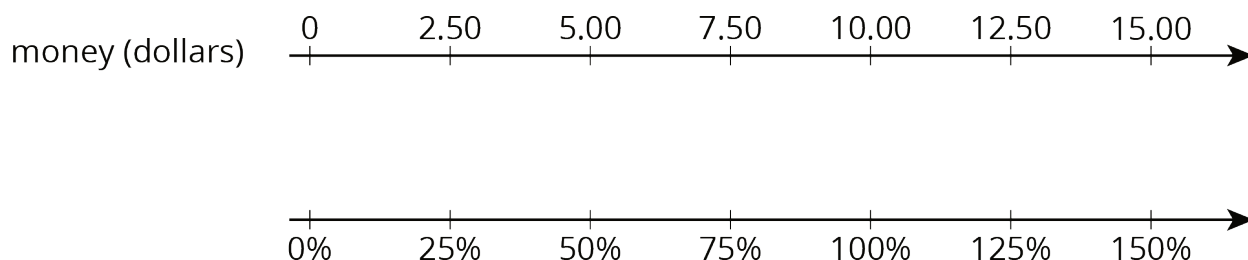
2. The coins in Diego's pocket are worth 150% of a dollar. How much are they worth (in dollars)?

3. Elena has 3 quarters and 5 dimes. What percentage of a dollar does she have?

Lesson 10 Summary

A **percentage** is a *rate per 100*.

We can find percentages of \$10 using a double number line where 10 and 100% are aligned, as shown here:



Looking at the double number line, we can see that \$5.00 is 50% of \$10.00 and that \$12.50 is 125% of \$10.00.