

# Finding the Percent of a Number

When working with percents, one of the most common tasks we need to perform is to find the percent of a number. For example, if you buy a shirt, you will have to pay 5% GST (Goods and Services Tax) on the price. To figure out how much you will actually pay, you need to know what 5% of the price is.

The key word in finding the percent of a number is the word "of". Recall from when we worked with fractions that "of" means multiplication. How might we use multiplication to find the percent of a number?

## Problem 1

What is 50% written as a fraction?

What is 50% OF \$10?

How can we find 50% OF \$10 by multiplication?

How can we find 31% of \$15 by multiplication?

**Conclusion:** We can find the percent OF a number by \_\_\_\_\_.

## Check your understanding:

1. If a shirt costs \$24 and you need to pay 5% GST, how much GST will you pay? What is the total price of the shirt?

## Percent Change

When some number changes, it is sometimes useful to express this change in a percent. Why would this be more useful than simply saying the amount it changed by?

### Problem 2: Population of Provinces

Year	British Columbia	Québec
2001	3 900 000	7 200 000
2006		

The population of BC grew by 5% between 2001 and 2006. What was the population in 2006?

The population of Québec grew by 4% between 2001 and 2006. What was the population in 2006?

Which of these provinces had the largest growth **rate** (measured with a percent change)? Which one had the largest increase in population?

### Check your Understanding

Greenhouse gas emissions in Canada increased by 22% between 1990 and 2006. In 1990 we emitted the equivalent of 592 million tonnes of carbon dioxide. How much was emitted in 2006?