### Calculate percentages

Chapter 7

## Content

- Find the percentage of a total
- Find the percentage of change between two number
- Find the total when you know the amount and percentage
- Find an amount when you know the total and percentage
- Increase or decrease a number by a percentage

### Find the percentage of a total



### Find the percentage of a total

Let's say that you answered 42 questions out of 50 correctly on a test. What is the percentage of correct answers?

- 1. Click any blank cell.
- 2. Type =42/50, and then press RETURN .

The result is 0.84.

3. Select the cell that contains the result from step 2.

00.

4. On the **Home** tab, click <u>%</u>.

or Decrease Decimal

The result is 84.00%, which is the percentage of correct answers on the test.

Note: To change the number of decimal places that appear in the result, click Increase Decimal



## Find the percentage of change between two number

#### Find the percentage of change between two numbers

Let's say that your earnings are \$2,342 in November and \$2,500 in December. What is the percentage of change in your earnings between these two months? Then, if your earnings are \$2,425 in January, what is the percentage of change in your earnings between December and January? You can calculate the difference by subtracting your new earnings from your original earnings, and then dividing the result by your original earnings.

Calculate a percentage of increase

- Click any blank cell.
- Type = (2500-2342)/2342, and then press RETURN.

The result is 0.06746.

- Select the cell that contains the result from step 2.
- 4. On the **Home** tab, click 🧐

or Decrease Decimal

The result is 6.75%, which is the percentage of increase in earnings.

Note: To change the number of decimal places that appear in the result, click Increase Decimal



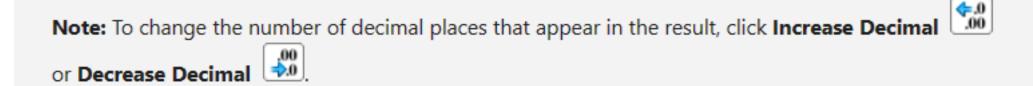
#### Calculate a percentage of decrease

- 1. Click any blank cell.
- 2. Type =(2425-2500)/2500, and then press RETURN .

The result is -0.03000.

- 3. Select the cell that contains the result from step 2.
- 4. On the **Home** tab, click

The result is -3.00%, which is the percentage of decrease in earnings.



## Find the total when you know the amount and percentage

#### Find the total when you know the amount and percentage

Let's say that the sale price of a shirt is \$15, which is 25% off the original price. What is the original price? In this example, you want to find 75% of which number equals 15.

- 1. Click any blank cell.
- 2. Type =15/0.75, and then press RETURN.

The result is 20.

- 3. Select the cell that contains the result from step 2.
- 4. In newer versions:

On the **Home** tab, click

or Decrease Decimal

The result is \$20.00, which is the original price of the shirt.

In Excel for Mac 2011:

On the Home tab, under Number, click Currency



The result is \$20.00, which is the original price of the shirt.

Note: To change the number of decimal places that appear in the result, click Increase Decimal

0.=>

## Find an amount when you know the total and percentage

#### Find an amount when you know the total and percentage

Let's say that want to purchase a computer for \$800 and must pay an additional 8.9% in sales tax. How much do you have to pay for the sales tax? In this example, you want to find 8.9% of 800.

- 1. Click any blank cell.
- Type =800\*0.089, and then press RETURN.

The result is 71.2.

- 3. Select the cell that contains the result from step 2.
- 4. In newer versions:

On the **Home** tab, click

#### In Excel for Mac 2011:

On the Home tab, under Number, click Currency

The result is \$71.20, which is the sales tax amount for the computer.

Note: To change the number of decimal places that appear in the result, click Increase Decimal





## Increase or decrease a number by a percentage

### Increase or decrease a number by a percentage

Let's say that you spend an average of \$113 on food each week, and you want to increase your weekly food expenditures by 25%. How much can you spend? Or, if you want to decrease your weekly food allowance of \$113 by 25%, what is your new weekly allowance?

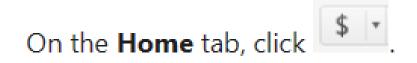
Increase a number by a percentage

- 1. Click any blank cell.
- 2. Type =113\*(1+0.25), and then press RETURN .

The result is 141.25.

3. Select the cell that contains the result from step 2.

#### 4. In newer versions:



In Excel for Mac 2011:

On the Home tab, under Number, click Currency

The result is \$141.25, which is a 25% increase in weekly food expenditures.

**Note:** To change the number of decimal places that appear in the result, click **Increase Decimal** or **Decrease Decimal**.

0.**+** 

#### Decrease a number by a percentage

- 1. Click any blank cell.
- 2. Type =113\*(1-0.25), and then press RETURN .

The result is 84.75.

- 3. Select the cell that contains the result from step 2.
- 4. In newer versions:

On the **Home** tab, click



#### In Excel for Mac 2011:

or Decrease Decimal

On the Home tab, under Number, click Currency

=>.0

The result is \$84.75, which is a 25% reduction in weekly food expenditures.

Note: To change the number of decimal places that appear in the result, click Increase Decimal



# Thank you