What is the change in percentage?

Percentage change calculations are about comparing old values with new values. There are two ways to do this (use whichever method you prefer):

Method 1

Step 1: Calculate the change (subtract the old value from the new value)

Step 2: Divide that change by the old value (this will give you a decimal)

Step 3: Convert this to a percentage (multiply it by 100 and add a % sign)

Method 2

Step 1: Divide the new value by the old value (this will give you a decimal)

Step 2: Convert it to a percentage (multiply it by 100 and add a % sign)

Step 3: Subtract 100% from it.

Note

If the result is positive, it is a percentage increase; if it is a negative, just remove the - and call it a percentage decrease.

Example

Tyrex Ltd had 30,000 employees in 2013 and 31,000 employees in 2015. What is the percentage change between 2013 and 2015?

Step 1: 31,000 - 30,000 = 1000

Step 2: 1000 / 30,000 = 0.033

Step 3: 0.033 x 100 = 3.3%

Step 1: 31,000 / 30,000 = 1.033

Step 2: 1.033 x 100 = 103.3%

Step 3: 103.3% - 100% = 3.3%

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Example

Dividends	2013	2014
ABC Ltd	£2.77	£2.50
DEF Plc	£6.41	£6.75

(i) What was the percentage change in ABC Ltd dividends between 2013 and 2014?

Step 1: 2.50 - 2.77 = -0.27

Step 2: -0.27 / 2.77 = -0.097

Step 3: -0.097 x 100 = -9.7%

Step 1: 2.50/2.77 = 0.903

Step 2: 0.903 x 100 = 90.3%

Step 3: 90.3 – 100 = -9.7%

Therefore, there was a 9.7% decrease.

(ii) What was the percentage change in DEF Plc dividends between 2013 and 2014?

Step 1: 6.75 – 6.41 = 0.34

Step 2: 0.34 / 6.41 = 0.053

Step 3: 0.053 x 100 = 5.3%

Step 1: 6.75/6.41 = 1.053

Step 2: 1.053 x100 = 105.3%

Step 3: 105.3 - 100 = 5.3%

Therefore, there was a 5.3% increase.

Note

We always put the change over the old value because we want to know how much the old value has changed.

Speed Tip!

If you are given multiple choice answers, can you eliminate any of them straightaway? Also, can you easily work forwards from the remaining answers?

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