

Extra Information for Maths work beginning the 18/05/2020

You Tube links: Math Antics - What are Percentages? Convert any Fraction to a Decimal, Percent and Fractions and What percent is it?

Decimals:

- To the right after the decimal point the numbers are getting 10 times smaller
- To the left before the decimal point the numbers are getting 10 times bigger

Percentages:

- Percentage is always out of a 100
- $20\% = 20/100 = 0.2$
- $2\% = 2/100 = 0.02$
- $41\% = 41/100 = 0.41$
- $100\% = 100/100 = 1$

Look back on all the tables we covered changing fractions to decimals and percentages

Increasing or decreasing something by a percentage. It is much easier to work out the answer if you change the percentage to a fraction.

Increase - you are going to add something on

Decrease - you are going to have to take something away

Eg. If you have to increase 100 euro by 10%

- Change the 10% to a fraction - $10\% = 10/100 = 1/10$
- Find $1/10$ of a hundred euro = 10 euro
- Increase the 100 euro by 10 euro = 100 euro + 10 euro = 110 euro
- Answer = 110 euro

Eg. Decrease 100 euro by 10%

- We know from the above sum that $10\% = 1/10$ and $1/10$ of a hundred is 10 euro
- Decrease the 100 euro by 10 euro = 100 euro - 10 euro = 90 euro

Look back on how to change a fraction to a decimal (Maths example copy)

Method 1:

- Eg. $1/5 = ???$ decimal
- Divide the bottom number (denominator) into the top number (numerator) add a decimal point and 3 zeros after the decimal point - eg. 5 into 1.000
- 5 will go into 1.000 = .200 (which is 0.2)

Method 2:

- $1/5 = ?/100$
- What did you do to the 5 to get to 100 - multiplied it by 20
- What ever you do to the denominator you also have to do to the numerator
- $1/5$ multiplied by $20/20 = 20/100 = 2/10 = 0.2$

It's very important for all problems in maths that you -

- Read the questions very carefully.
- Underline key words - sale price, reduction, extra free, added on
- Ask yourself - 'what have I been asked to do?'
- Read over the question and check all your answers

Profit or loss percentages (6th class)

- To work out a percentage profit/loss we need to know the cost price and the profit/loss
- For the sums that you have to complete you are missing either the selling price, the cost price or the profit/loss
- Work out from the information that you've been given the missing pieces of information that you need to be able to complete the sum eg. pg. 133 (b)
(1) we know the selling price is 21 euro (2) the profit is 3 euro (we know it's a profit because they told us that all losses are shown in red brackets) then from the information we've been given we can work out that the cost price is 18 euro (cost price is what the shop buys something for before it is sold for a profit or a loss)
- To finish the sum and work out the percentage profit/loss - put the profit or loss over the cost price
- We know that 3 euro is the profit and 18 euro is the cost price so $3/18 = 1/6 = 16 \text{ and } 2/3\%$