Direct Proportion

Example   8 pens cost €2.16. Calculate how much 7 pens cost.

To find out the cost of one item we use the so-called unitary method - divide the cost by how many items have been bought. Then any amount can be calculated when the value of 1 is known.
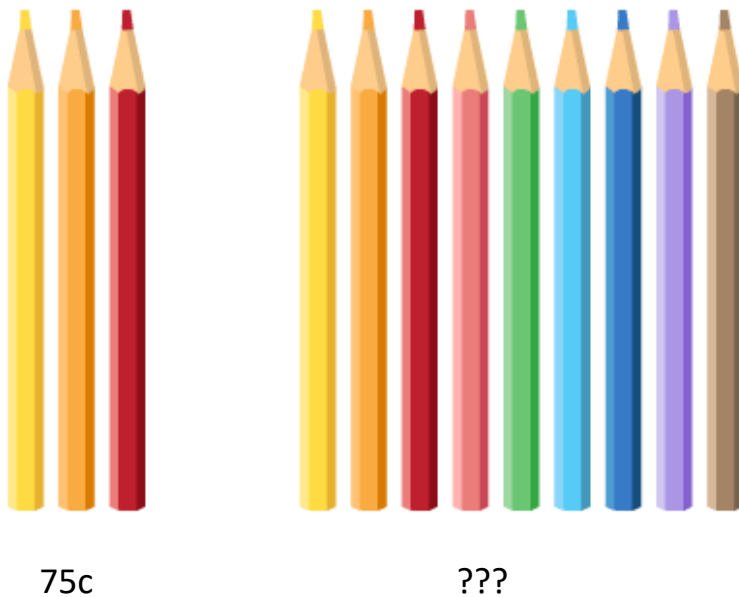
8 pens cost €2.16.

Dividing by 8, we get the cost of 1 pen: € 2.16 ÷ 8 = € 0.27

Multiplying by 7:   € 0.27 x 7 = € 1.89

So, 7 pens cost €1.89.

Example   If three pencils cost 75c, how much do nine pencils cost?

75c   ???

3 pencils cost 75c and therefore if we divide 75c by 3, we get the price of one pencil.

75c ÷ 3 = 25c

Nine pencils would therefore cost: 25 x 9 = 225

Example   A recipe for four pancakes uses 300 ml of milk. How much milk is needed for ten pancakes?

300 ml are needed for four pancakes and therefore to find how much milk is needed for one pancake we need to divide by 4

300 ml ÷ 4 = 75 ml

So to make ten pancakes, we need 75 ml x 10 = 750 ml

Example   7 apples for €1.75. How much do 3 apples cost?

One apple would cost €1.75 ÷ 7 = €0.25 or 25c

So three apples would cost 25c × 3 = 75c