*Maths-it Podcast*

*Ratio and proportion*

## Topics

Use ratio notation – Simplify a ratio – Divide into a given ratio
Solve word problems about ratio and proportion

## Questions

**1.** Sydney has 28 DVDs and 42 CDs.

Write down the ratio of the number of DVDs to the number of CDs.
Give your ratio in its simplest form.

………………………….
**(Total 2 marks)**

**2.** Einstein, Fermat and Galileo share £132 in the ratio 3:5:4

Calculate the amount of money Fermat gets.

£……………………………
**(Total 3 marks)**

**3.** A map has a scale 1 cm : 5 km

AB is a distance on the map.

A ————————————— B

By measuring AB, work out the real distance, in km, from A to B.

………………. km
**(Total 2 marks)**

**4.** £70 is shared between Bruce and Wayne in the ratio 5 : 2.

Wayne thinks he should get £28 but Ron thinks he should get £8 less.

Explain who is correct, giving a reason for your answer.

………………………………………………………………………………………………

………………………………………………………………………………………………

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**(Total 2 marks)**

*Ratio and proportion*

**5.** The ratio of girls to boys in a school is 4 : 5

(a) What fraction of these students are boys?

……………

**(2)**

In Year 11 the ratio of girls to boys is 4 : 3
There are 120 girls in Year 11.

(b) Work out the number of boys in Year 11.

………………

**(2)**

**(Total 4 marks)**

**6.** This is a recipe for making Honey cake for **4** people.

**Honey Cake**
Ingredients for **4** people

- 250g clear honey
- 220g butter
- 100g dark muscovado sugar
- 4 medium eggs
- 300g self-raising flour

Milo is making Honey cake for **10** people.
Work out the amount he needs.

........................ g of honey

........................ g of butter

........................ g of sugar

........................ eggs

........................ g of flour

**(Total 3 marks)**

7.    Christiano bought 13 pairs of underpants for a total cost of £103.35.

Carlos bought 7 pairs of underpants.

The cost of each pair of underpants bought by Christiano and Carlos was the same.

Work out how much Carlos paid for his 7 pairs of underpants.

£ ………………………
(**Total 2 marks**)

8.    The cost of 4 kg of broccoli is £5.52

The total cost of 3 kg of broccoli and 2.5 kg of carrots is £5.69

Work out the cost of 1 kg of carrots.
Give your answer in pence.

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(**Total 3 marks**)