

IGCSE 2 year Week 6 homework

1 Express each ratio in its simplest form

- a) 9 : 6 b) 45 : 75 c) 56 : 140 d) 18 : 12 : 30 e) 3 hrs: 45 minutes f) 2.4km : 180m

2 Express these ratios in the form 1 : n

- a) 2 : 8 b) 5 : 30 c) 8 : 4 d) 4 : 3 e) 12 : 3

3 Express these ratios in the form n : 1

- a) 20 : 4 b) 205 : 5 c) 5 : 2 d) 4 : 5

4 Divide the following quantities into the ratios given

- a) £24 2 : 1 b) £350 3 : 2 c) £6.90 5 : 1 d) £595 5 : 2 e) 3 & 3/4 into the ratio 2 : 3

5 If 3/8 of students in a school are boys what is the ratio of boys to girls

6 £225 is left to Mark and Ria in the ratio of their ages,
Mark is 13 and Ria is 12, how much do they receive each

7 Tim & Maisy divide some sweets between them in the ratio 2 : 3
If Tim gets 18 sweets how many sweets does Maisy get?

8 Tim & Maisy now divide some toffees between them, this time in the ratio 3 : 4
Maisie gets 5 more toffees than Tim does, how many toffees do they each receive?

9 £400 is divided between Angela, Bert & Chris so that Angela has twice as much as Bert and Bert has three times as much as Chris. How much does Bert receive?

10 John mixes green paint using blue and yellow paint in the ratio 2 : 5

- a) If John uses 150ml of yellow how much blue paint will he need?
b) If he uses 36ml of blue paint how much yellow paint will he need?
c) If he makes 350ml of paint how much blue & yellow paint will he need?

11 The angles in a triangle are in the ratio 15 : 19 : 11 what are the size of the three angles?

12 Dawn & Scott share some money between them in the ratio 5 : 4

Dawn starts off with £25. If she then gives £10 to Scott, what ratio is the money now divided?

13 A model car is built using a scale of 1: 25

- a) The scale model has a length of 20cm how long is the actual car in i) cm ii) m
b) The actual car has wheel diameter of 45cm, what is the wheel diameter of the model in cm

14 Dean, Ed and Fritha share some money in the ratio 4 : 5 : 7

Dean and Fritha get £132 between them

- a) how much does Dean get? b) how much do they get in total?

15 If 5 CDs cost £28.25 How much does

- a) 1 CD cost b) 7 CDs cost c) 12 CDs cost

16 Gill is paid £49.80 for 6 hours work. How much is she paid for

- a) 5 hours work b) If Gill works for 5 days, working 8 hours a day, how much does she get paid in total?

17 Which is the better value in each pair

a) A a packet of 3 choc bars costing 72p OR B a packet of 5 choc bars costing £1.18

c) A a 250ml jar of honey costing £3.10 B a 300ml jar of honey costing £3.75

d) A a 1 kg box of washing powder costing £3.85 B a 300g tub of washing powder costing £1.12

18 If it takes 4 men 8 hours to build a wall, how long will it take

- a) 1 man b) 8 men to build the same length wall

19 If it takes 10 men 2 hours to mow a meadow, how long will it take

- a) 1 man b) 4 men

20 In a factory it takes 10 machines to make 2000 cupcakes in 1 hour

- a) If there were only 2 machines, how long would they take to make 2000 cupcakes
b) How many machines would be needed to make 5000 cupcakes in just 1 hour
c) what is the assumption you have made to answer a) and b)