Ratio 1F Assessment — THE ANSWERS

Foundation Level — *All questions*
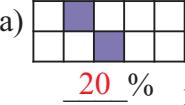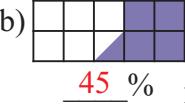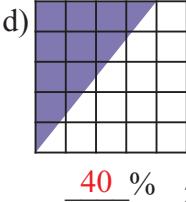
Clip	Grade	Title of clip	Question(s)	Marked out of	Score	%
38	2	Introduction to Ratio	1 - 2	10	___	__
39	2	Using Ratio for Recipe Questions	3 - 4	7	___	__
40	2	Introduction to Percentages	5	6	___	__
41	2	Value for Money	6 - 7	6	___	__
42	2	Introduction to Proportion	8 - 10	8	___	__
105	3	Exchanging Money	11	5	___	__
106	3	Sharing using Ratio	12 - 14	10	___	__
107	3	Ratios, Fractions and Graphs	15 - 16	8	___	__

Out of 60   TOTAL SCORE _____

Final Percentage [   ] %

1) Write the following ratios in their simplest form

   a) 3 : 24

      _1_ : _8_   **1**

   b) 6 : 20

      _3_ : _10_   **1**

   c) 8 : 12 : 10

      _4_ : _6_ : _5_   **2**

   d) 18 : 6 : 54

      _3_ : _1_ : _9_   **2**

2) The scale on a map is 1 : 10 000

   a) Parnby is 17 cm from Houth on the map. How many km is Parnby from Houth?

      _1.7_ km   **2**

   b) If Houth is 11.5 km from Kikby, how many cm apart will they be on the map?

      _115_ cm   **2**

3) Here are the ingredients needed to make 10 flapjacks.

   | 100 g Oats |
   | 80 g Butter |
   | 50 ml Syrup |
   | 54 g Sugar |

   Work out the amount of each ingredient needed to make 25 flapjacks.

   | _250_ g Oats |
   | _200_ g Butter |
   | _125_ ml Syrup |
   | _135_ g Sugar |
   4

4) 225 g of butter are needed to make 18 mince pies.
   Anais has 475 g of butter.
   Does she have enough butter to make 40 of these mince pies?
   You must show all your working.

   225 ÷ 18 = 12.5 g per mince pie

   40 × 12.5 = 500 g needed

   Anais hasn't got enough butter for 40 mince pies.

   3

5) What percentage of these grids are shaded?

   a)

      _20_ %   **1**

   b)

      _45_ %   **1**

   c)

      _70_ %   **2**

   d)

      _40_ %   **2**

6) A pack of 4 pens costs £1.60
   A pack of 6 pens costs £1.80

   Which pack is the best value for money?
   You must show all your working.

   1.60 ÷ 4 = 40p
   1.80 ÷ 6 = 30p

   Pack of 6 pens at £1.80 is better value.

   3

7) A 3 kg bag of potatoes costs £2.79
   A 5 kg bag of potatoes costs £4.85

   Which is the best value for money?
   You must show all your working.

   2.79 ÷ 3 = 93p
   4.85 ÷ 5 = 97p

   Bag of 3 kg at £2.79 is better value.

   3

8) Brian made 8 pancakes with 160 g of flour.

   a) How many pancakes can he make with 320 g of flour?

      _16_   **1**

   b) How many pancakes can he make with 200 g of flour?

      _10_   **2**

9) If 6 mangoes cost £7.50, how much would 10 of them cost?

   _£12.50_   **2**

10) 3 people can build a wall in 4 hours.
    How long would it take 2 people to build the same wall?

    6 hrs   **3**

11) Emma is travelling to Munich.
She changes £450 into Euros (€).
The exchange rate is £1 = €1.37

a) Work out how many € Emma gets.

€ 616.50   **2**

On her return home, Emma still has €152
She wants to change them back to £
The exchange rate is now £1 = €1.33

b) Work out how many £ she would get.

£114.29   **3**

12) Bill, Tim and Rose share £120 between them
in the ratio 2 : 1 : 3
How much should each of them receive?

Bill £40

Tim £20

Rose £60   **3**

13) Yasmin and Ibrahim buy a present for their dad,
sharing the cost in the ratio 6 : 5
Ibrahim pays £15
How much did the present cost?

£ 33   **3**

14) To obtain the desired colour for his project,
Rick is mixing red paint with yellow paint
in the ratio 5 : 3
A litre of red paint costs £4.99 and a litre of
yellow paint costs £7.99
If Rick needs 40 litres of his desired colour,
how much will it cost him?

£244.60   **4**

15) In a class, the ratio of boys to girls is 3 : 2
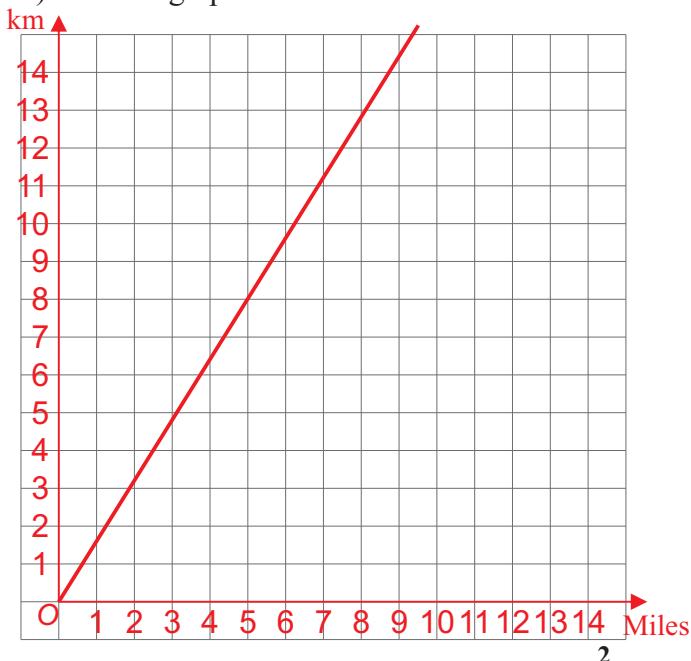
a) What fraction of the class are boys?

$\frac{3}{5}$ **1**

b) What fraction of the class are girls?

$\frac{2}{5}$ **1**

16) Miles and km are in the ratio 5 : 8
a) Draw a graph to illustrate this.

b) Use your graph to convert 12 km to miles.

7.5 miles   **1**

Carol is on a 1200 km journey by car.
She has already travelled 300 miles.

c) Work out how many km she has left.

720 km   **3**