

# Ratio and proportion

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

Mark / 12 %

1) Simplify [3]

a)  $30 : 3$

b)  $77 : 165$

c)  $56 : 24 : 48$

2) Write in the form  $1 : n$ , giving your answer as a decimal rounded to 3 significant figures [1]

$11 : 23$

3) Share 32 coins between Manuel and Bria in the ratio  $6 : 2$  [1]

Manuel gets  coins and Bria gets  coins

4) Divide 100 g in the ratio  $13 : 3 : 4$  [1]

g :  g :  g

5) Divide £6.97 between Ryan and Emanuel in the ratio  $2 : 5$ . [1]  
Give your answer to the nearest penny.

Ryan gets £  and Emanuel gets £

6) A recipe requires 3 cups of sugar to make 6 cookies.

[1]

How many cups of sugar will be needed to make 12 cookies?

cups of sugar

7) A recipe for pastry requires 200g of flour to make 600g of pastry.

[1]

How many grams of flour will be needed to make 120g of pastry?

g

8) A bottling machine makes 70 bottles in 19 hours.

[1]

How many bottles will it make in 7 hours?

bottles

9) After 32 games of a football season, Chelsea won 24 games and lost 8 games.

[1]

At this rate, how many games will they win in a 59 game season?

games

10) If Dakota walks 3 miles in 56 minutes, how many miles will he walk in 94 minutes?

[1]

miles

## Solutions for the assessment Ratio and proportion

1) a)  $10 : 1$

b)  $7 : 15$

c)  $7 : 3 : 6$

2)  $1 : 2.09$

3) Manuel gets 24 coins and Bria gets 8 coins

4)  $65 \text{ g} : 15 \text{ g} : 20 \text{ g}$

5) Ryan gets £1.99 and Emanuel gets £4.98

6) 6 cups of sugar

7) 40 g

8) 26 bottles

9) 44 games

10) 5.04 miles