



Name: _____ **Date:** _____ **Score:** _____ / 36

- 1** Write down the ratio 42 : 6 in the form $n : 1$. (1 mark)

Answer _____

- 2** a. Write the ratio 8 : 28 in the form $1 : n$
b. A school has 15 teachers and 360 pupils. Write the ratio of teachers to pupils in the form $1 : n$ (2 marks)

Answer _____

- 3** In a gym class, the ratio of the number of men to the number of women is 4 : 5.
There are 20 men in the class.
Work out the total number of people in the class. (2 marks)

Answer _____

- 4** Kofi makes two jugs of orange squash.
Jug A: 150 ml of squash mixed with 600 ml of water.
Jug B: 200 ml of squash mixed with 900 ml of water.
Which jug has the stronger taste of orange? Show your working by writing each ratio of squash to water in the form $1 : n$ (2 marks)

Answer _____

- 5** Amir, Bella and Carl share £132 in the ratio 1 : 4 : 6.
Work out how much money each of them gets. (3 marks)

Answer _____

- 6 The exchange rate is £1 = €1.14.
Nadia changes £250 into euros.
Work out how many euros she gets.

(2 marks)

Answer _____

- 7 5 miles is about 8 kilometres.
- a. A school fun run is 12 km long. Work out about how many miles this is.
- b. A road sign says London is 25 miles away. Work out about how many kilometres this is.

(2 marks)

Answer _____

- 8 3 kg of potatoes cost £2.64.
Work out the cost of 7 kg of these potatoes.

(3 marks)

Answer _____

- 9 Here are the prices of cinema tickets at two cinemas.

Number of tickets	2	5	8
Cinema A cost	£13	£32.50	£52
Cinema B cost	£14	£30	£46

- a. At one cinema the cost is directly proportional to the number of tickets. Which cinema?
Give a reason.
- b. Work out the cost of 11 tickets at that cinema.

(3 marks)

Answer _____

- 10** Each month Tom is paid £1800.
He saves 20% of the £1800.
He splits the rest between rent and bills in the ratio 5 : 3.
Work out how much Tom spends on rent each month.

(3 marks)

Answer _____

- 11** 3 identical machines take 10 hours to print an order of leaflets.
Work out how long 5 of these machines would take to print the same order.

(2 marks)

Answer _____

- 12** In a fruit bowl there are apples, bananas and pears.
The ratio of apples to bananas is 3 : 2.
The ratio of bananas to pears is 4 : 3.
There are 24 apples in the bowl.
Work out the number of pears in the bowl.

(3 marks)

Answer _____

EXTENSION QUESTIONS

- 13** y is directly proportional to x . When $x = 6$, $y = 15$
- Find a formula for y in terms of x .
 - Work out the value of y when $x = 10$
 - Work out the value of x when $y = 40$

(3 marks)

Answer _____

- 14 Leah and Sam share £480 in the ratio 5 : 7.
Sam gives 30% of his share to charity.
Leah gives £60 of her share to charity.
Sam gives more money to charity than Leah does.
Work out how much more.

(5 marks)

Answer _____

End of questions | Total 36 marks