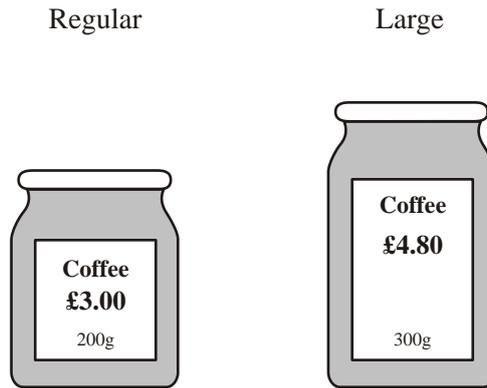


Ratio and Proportion Exam Style Questions

1. A supermarket sells jars of coffee of the same brand in two different sizes.



Which jar gives the better value for money?
You **must** show your working.

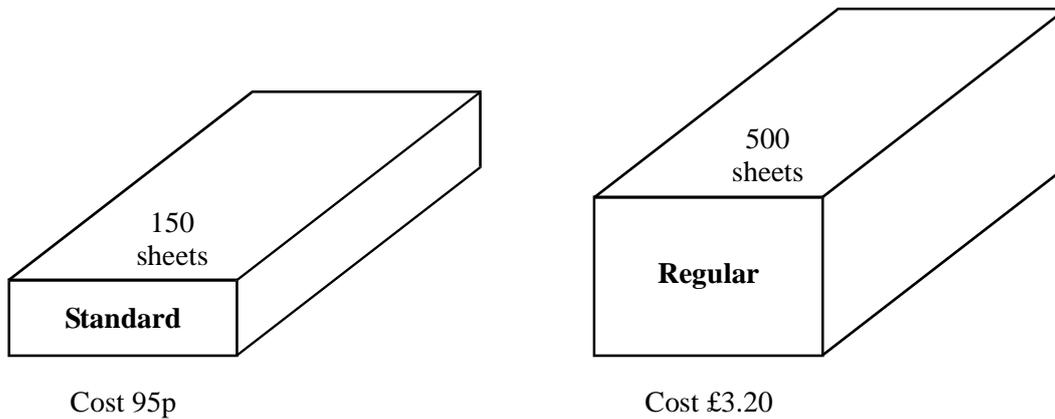
(Total 3 marks)

2. Sweets are sold in two sizes of packet.
The large packet holds 850 grams of sweets and costs £2.25.
The small packet holds 280 grams of sweets and costs 75 pence.

Which packet of sweets is the better value for money?
You **must** show all your working.

(Total 4 marks)

3. A shop sells two different packs of the same brand of paper.



Which of the two packs gives the better value for money?
You **must** show all your working.

(Total 4 marks)

4. Paul and Kelly each buy a can of drink.



Volume 500 ml
Sugar per can 35 g



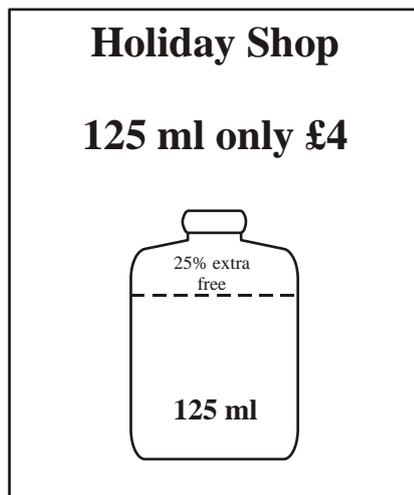
Volume 330 ml
Sugar per can 28 g

Paul drinks 100 ml of the Blackcurrant juice.
Kelly drinks 100 ml of the Fizzy orange.

Who drinks more sugar?
You **must** show your working.

(Total 3 marks)

5. Two advertisements for the same type of sun oil are shown.
The sun oil is usually sold in 100 ml bottles which cost £4 each.



Which offer gives the better value for money?
You **must** show all your working.

(Total 5 marks)

6. (a) Tom has £2200.

He gives $\frac{1}{4}$ to his son and $\frac{2}{5}$ to his daughter.

How much does Tom keep for himself?

You **must** show all your working.

(3)

- (b) Mrs Jones inherits £12 000.
She divides the £12 000 between her three children Laura, Mark and Nancy in the ratio 7 : 8 : 9, respectively.
How much does Laura receive?

(2)
(Total 5 marks)

7. A short necklace has 32 gold beads and 8 black beads.
A long necklace has a total of 60 beads.
Both necklaces have the same ratio of gold beads to black beads.

How many black beads are on the long necklace?

(Total 3 marks)

8. The ratio of girls to boys in a school is 13:12
There are 572 girls in the school.

(a) How many pupils are there in the school altogether?

(3)

- (b) Harry is a Year 10 pupil at the school.
He says that the ratio of girls to boys in Year 10 will also be 13:12

Explain why Harry may **not** be correct to say this.

(1)

(Total 4 marks)

9. The sizes of the interior angles of a quadrilateral are in the ratio

$$3 : 4 : 6 : 7$$

Calculate the size of the largest angle.

(Total 3 marks)

10. A pile of 20 sheets of card is 1 cm high. How high is a pile of 50 sheets of card?

(Total 2 marks)

11. The ingredients needed to make 500 millilitres (ml) of a fruit drink are

orange juice	300 ml
mango juice	60 ml
lemonade	140 ml

Robert wants to make 750 ml of the fruit drink.
How much lemonade will he need?

(Total 2 marks)

12. The cost of 30 bottles of water is £21.
What is the cost of 45 bottles of water?

(Total 3 marks)

13. The table shows the amounts needed to make 36 mince pies.

Ingredient	Amount for 36 pies	Amount for 48 pies
Plain Flour	330 g	
Lard	75 g	
Butter	75 g	
Mincemeat	720 g	

Calculate the amounts needed to make 48 mince pies.
Put your answers in the table.

(Total 3 marks)

14. The following information is from a table on the side of a packet of biscuits.

NUTRITION INFORMATION		
AVERAGE VALUES	PER BISCUIT	PER 100 g
PROTEIN	0.7 g	5.5 g

Use this information to work out the weight of one biscuit.
Give your answer to an appropriate degree of accuracy.

(Total 3 marks)