

STAGE 7 MATHEMATICS

TOPIC QUESTIONS

TOPIC: RATIO

SET-1

- 1 Pink paint is made by mixing 9 parts of white paint with 5 parts of red paint.
Find the number of parts of red paint needed to mix with 54 parts of white paint.

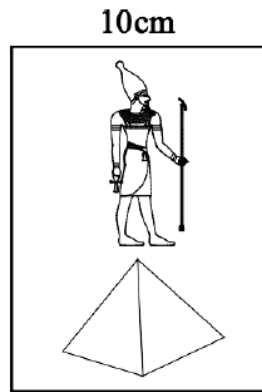
..... [1]

Mark Scheme:

30	1
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The diagram shows a postcard with a width of 10 cm.
The ratio of width to length of the postcard is 4 : 5



NOT TO
SCALE

(a) Work out the length of the postcard.

..... cm [1]

(b) Work out the area of the postcard.

..... cm² [1]

Mark Scheme:

(a)	12.5 [cm]	1	Accept $12\frac{1}{2}$ [cm]
(b)	125 [cm ²]	1	FT from <i>their</i> answer in part (a) \times 10 correctly evaluated.

- 3 There are 9 girls and 11 boys in a group.

Complete these sentences about the group.

The ratio of girls to boys is :

The fraction who are **girls** is

The percentage who are **boys** is %

[2]

Mark Scheme:

Answer	Marks	Further information
9 : 11 and $\frac{9}{20}$ and 55%	2	Accept equivalent ratio for 9 : 11, e.g. 1 : 1.2, 0.81 : 1 For 1.2 accept 1.22 or better. For 0.81 accept 0.82 or better. Accept equivalent fraction for $\frac{9}{20}$
Any two out of the three sentences correct.	B1	

4 Here is part of a recipe.

2 cups of flour
$\frac{3}{4}$ cup of water

(a) Write the ratio amount of flour : amount of water in its simplest form.

..... : [1]

(b) Naomi makes the recipe using 5 cups of flour.

Find how much water she uses.

..... cups [2]

Mark Scheme:

a)	8 : 3	1	
b)	1.875 (cups) or $1\frac{7}{8}$ or 1.88 or 1.9	2	Do not accept $\frac{15}{8}$ for 2 marks.
	$5 \times \frac{\text{their } 3}{\text{their } 8}$ oe or $5 + 2 \times \frac{3}{4}$ oe or 1.875 seen	M1	oe, e.g. $\frac{15}{8}$

- 5 Naomi and Samira share some apples.
Naomi receives less than half of the apples.

Draw a ring around the possible value of the ratio of Naomi's share to Samira's share.

1 : 5

3 : 2

1 : 1

7 : 5

[1]

Mark Scheme:

1 : 5	1	Accept any clear indication.
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