



Please write clearly in block capitals.

Centre number

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Candidate number

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Surname

Forename(s)

Candidate signature

I declare this is my own work.

GCSE MATHEMATICS

F

Foundation Tier
Middle Third

Paper 1 Non-Calculator

June 2025



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Pages	Mark
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TOTAL	

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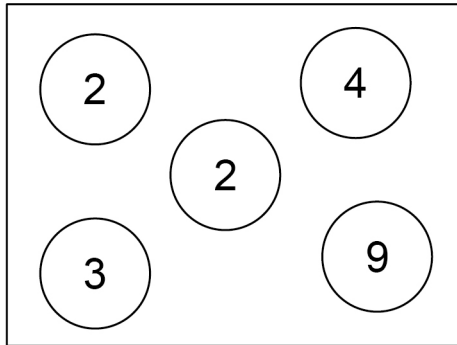
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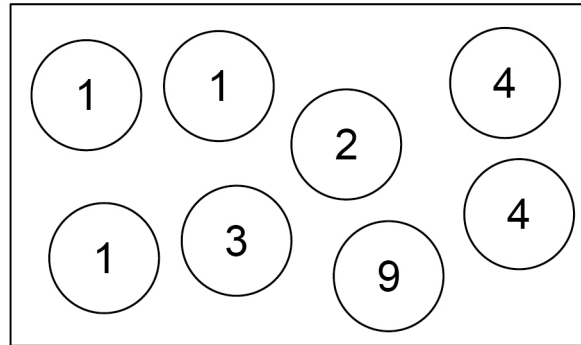
Answer **all** questions in the spaces provided.

- 9** Numbered discs are in two boxes.

Box A



Box B



- 9 (a)** Work out the ratio

total value of the numbers in **Box A** : total value of the numbers in **Box B**

Give your answer in its simplest form.

[3 marks]

Answer _____ : _____

- 9 (b)** One disc is picked at random from **Box A**.

Write down the probability that the number on the disc is greater than 6

[1 mark]

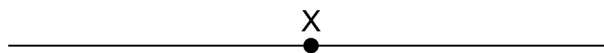
Answer _____

- 10** Work out the value of $2(a^2 + 3a)$ when $a = 4$ **[3 marks]**

Answer _____

- 11** In this question use a pair of compasses.
The line shown is the **diameter** of a circle, centre X.
Draw the circle.

[1 mark]



12 (a)

One day,

- a company runs 240 trains
- $\frac{1}{8}$ of these trains are late.

The company is charged £350 for each late train.

How much is the company charged that day?

[3 marks]

Answer £ _____

12 (b)

Hot drinks are sold at a station in the ratio

tea : coffee : hot chocolate = 3 : 5 : 2

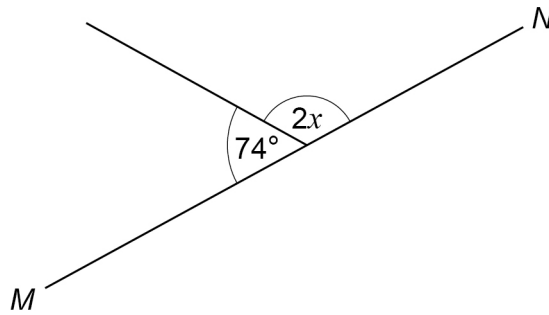
2600 hot drinks are sold.

How many coffees are sold?

[3 marks]

Answer _____

13

 MN is a straight line.Not drawn
accuratelyWork out the value of x .**[3 marks]**

Answer _____°

Turn over for the next question

- 14 (a)** By rounding each number to 1 significant figure, estimate the value of

$$1.98 \times 3.82 + 6.75^2$$

You **must** show your working.

[3 marks]

Answer _____

- 14 (b)** Is your answer to part (a) an overestimate or an underestimate?

Tick **one** box.

Overestimate

☐

Underestimate

☐

Give a reason for your answer.

[1 mark]

15 (a) A sphere has diameter 20 cm

Show that the radius of the sphere is 10 cm

[1 mark]

15 (b) The volume of a sphere is $\frac{4}{3}\pi r^3$ where r is the radius.

Work out the volume of a sphere with **diameter** 20 cm

Give your answer in terms of π

[2 marks]

Answer _____ cm^3

Turn over for the next question

16 (a)

$$d = \frac{800}{w}$$

- d represents the number of days to complete a job.
- w represents the number of workers needed.

Assume the job needs completing in 20 days.

How many workers are needed?

[3 marks]

Answer _____

16 (b)

In fact, the job needs completing in **fewer** than 20 days.

What does this mean about the number of workers that are needed?

Tick **one** box.

[1 mark]

☐

It is less than the answer to part (a)

☐

It is the same as the answer to part (a)

☐

It is greater than the answer to part (a)