F

2500/401

NATIONAL
QUALIFICATIONS
2007

THURSDAY, 3 MAY
9.00 AM – 9.20 AM

MATHEMATICS
STANDARD GRADE
Foundation Level
Paper 1
Non-calculator

Fill in these boxes and read what is printed below.

Full name of centre

Town

Forename(s)

Surname

Date of birth
  Day Month Year   Scottish candidate number   Number of seat

1 **You may NOT use a calculator**.

2 Answer as many questions as you can.

3 Write your working and answers in the spaces provided. Additional space is provided at the end of this question-answer book for use if required. If you use this space, write clearly the number of the question involved.

4 Full credit will be given only where the solution contains appropriate working.

5 Before leaving the examination room you must give this book to the invigilator. If you do not, you may lose all the marks for this paper.

SCOTTISH
QUALIFICATIONS
AUTHORITY

1. Work out the answers to the following.

(*a*)   1375 + 462

WORKING

ANSWER

1

(*b*)   5·23 × 4

WORKING

ANSWER

1

(*c*) $\frac{1}{8}$ of 120 metres

WORKING

ANSWER   metres

2

2.

Closing Down Sale
20% Off All Marked Prices

£150

Fred bought a bicycle in this sale.

The marked price was £150.

How much money was taken off the marked price?

WORKING	
ANSWER	£

2

3. Draw an enlargement of this shape on the grid below.

Make each of its sides twice as long.

4

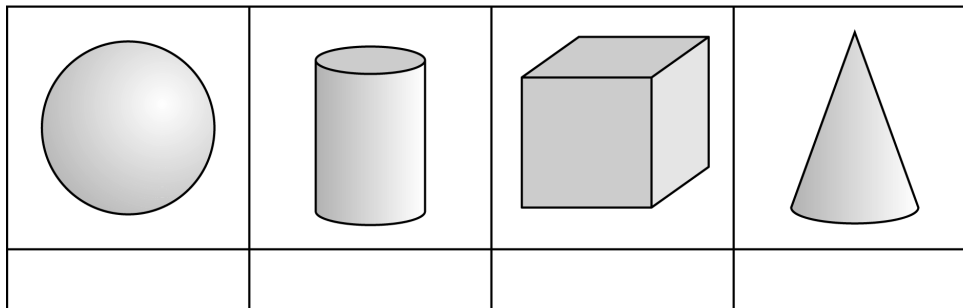**4.** When George decorates his son's bedroom, he uses a wallpaper border.
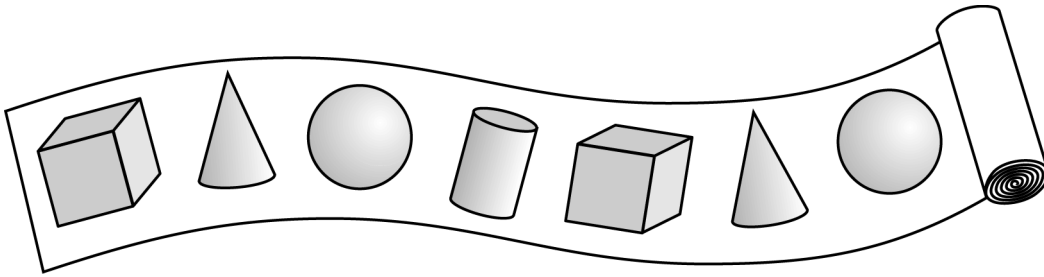
(*a*) Tick (✓) the **next** shape George will see as he continues to unroll the border.

1

(*b*) Write down the mathematical name of the shape you have ticked.

ANSWER	

1

5. Sheila's car can travel 20 kilometres on 1 litre of fuel.

She is planning a journey of 140 kilometres.

How many litres of fuel will Sheila need for the journey?

WORKING

ANSWER _____ litres

2

6. Pauline is given a film on DVD for her birthday.

The film has a running time of 135 minutes.

Pauline starts to watch the film at 7.50 pm.

She wants to watch the television programme, Football Highlights, which starts at 10.15 pm.
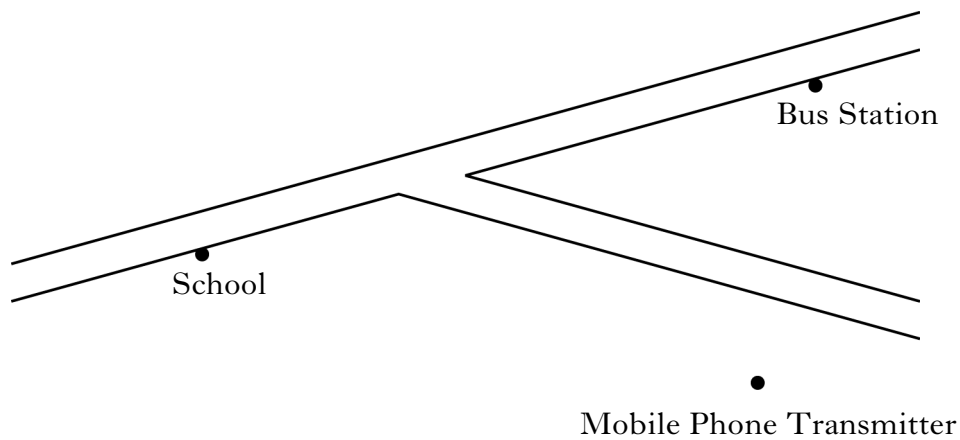
When the film ends, how long will it be until the start of Football Highlights?

WORKING

ANSWER   minutes

4

7. This map shows the positions of a School, a Bus Station and a Mobile Phone Transmitter.

(*a*) Measure the distance from the School to the Bus Station **on the map**.

ANSWER [   ] centimetres   **1**

(*b*) The scale of the map is **1 centimetre represents 100 metres**.

Find the actual distance from the School to the Bus Station.

WORKING

ANSWER [   ] metres   **2**

7. **(continued)**

(*c*) New safety regulations state that mobile phone transmitters should be more than **1 kilometre** from any school.

Is the Mobile Phone Transmitter shown on the map a safe distance from the School?

You must give a reason for your answer.

WORKING

ANSWER INCLUDING REASON

3

8. Rebecca is on a submarine looking at the radar screen.

A and B show the positions of two ships.

Ship A is on a bearing of 120° from the submarine.

Write down the bearing of ship B from the submarine.

ANSWER	°

1

[*END OF QUESTION PAPER*]

ADDITIONAL SPACE FOR ANSWERS

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