Paper Reference(s)

5382F/07

Edexcel GCSE

Mathematics (Modular) – 2381

Paper 7 (Non-Calculator)

Foundation Tier

Unit 2 Stage 1

Tuesday 2 March 2010 – Afternoon

Time: 30 minutes

Materials required for examination	**Items included with question papers**
Multiple Choice Answer Sheet	Nil
Ruler graduated in centimetres and millimetres, protractor, compasses, HB pencil, eraser.	

Instructions to Candidates

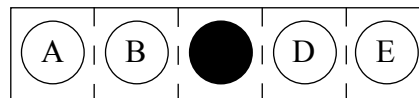Use a HB pencil. Do not open this booklet until you are told to do so.

Before the test begins:
Check that the answer sheet is for the correct test and that it contains your candidate details.

How to answer the test:
For each question, choose the right answer, A, B, C, D or E and mark it in HB pencil on the answer sheet.
For example, the answer C would be marked as shown.

Mark only **one** answer for each question. If you change your mind about an answer, rub out the first mark **completely**, then mark your new answer.

Answer **all** the questions.
Do any necessary calculations and rough work in this booklet. **Calculators must not be used.**
You must not take this booklet or the answer sheet out of the examination room.

Information for Candidates

There are 25 questions in this question paper. The total mark for this paper is 25.
There are 16 pages in this question paper. Any blank pages are indicated.

Advice to Candidates

Work steadily through the paper. Do not spend too long on one question.
If you cannot answer a question, leave it and attempt the next one.
Return at the end to those you have left out.

Turn over

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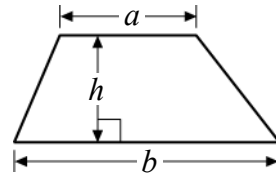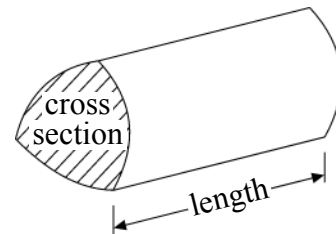
Formulae: Foundation Tier

You must not write on this formulae page.
Anything you write on this formulae page will gain NO credit.

Area of trapezium $= \frac{1}{2}(a + b)h$

Volume of prism = area of cross section × length

Answer ALL TWENTY FIVE questions using the answer sheet.

You must NOT use a calculator.

1. There were 3246 people at a football match.

   What is 3246 rounded to the nearest hundred?

3000	300	320	3200	3300
A	**B**	**C**	**D**	**E**

2. Here is a list of numbers.

   36   240   18   34   2307

   Connor is going to write down the numbers in order of size.
   He writes down the smallest number.

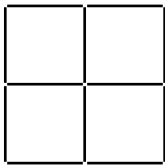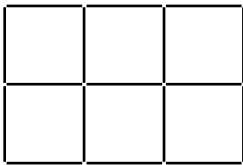   Which number should he write down next?

36	240	18	34	2307
A	**B**	**C**	**D**	**E**

3. Here is a sequence of patterns made from sticks.

Pattern 1   Pattern 2   Pattern 3

Pattern	1	2	3
Number of sticks	7	12	17

What is the number of sticks needed for Pattern 4?

21	22	23	24	25
A	**B**	**C**	**D**	**E**

4. Here is a shaded shape drawn on a grid of squares.
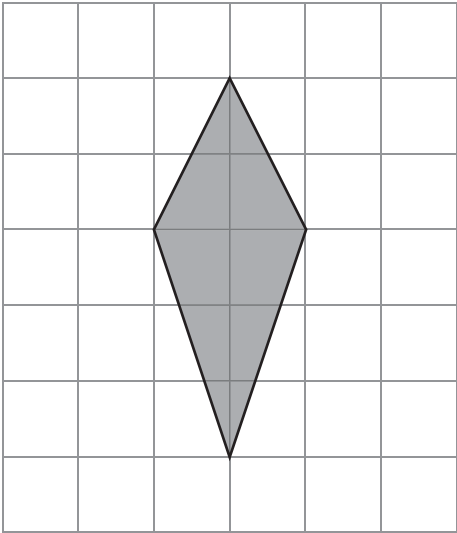
What is the mathematical name for this shaded shape?

Kite	Rectangle	Square	Trapezium	Rhombus
A	**B**	**C**	**D**	**E**

5. $24 \times 7 =$

168	42	161	175	1428
A	**B**	**C**	**D**	**E**

6. A bottle of orange juice costs 49p.

Which is the best estimate of the total cost of 36 of these bottles?
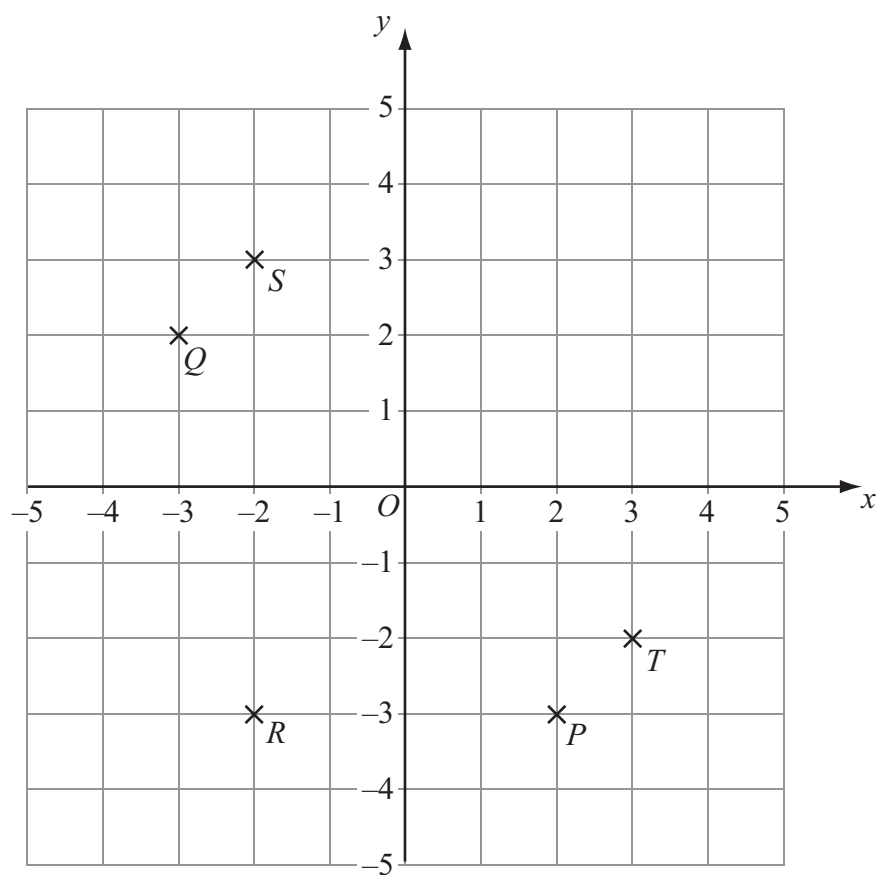
£1764	£200	£2000	£85	£20
A	**B**	**C**	**D**	**E**

7.

Which one of the points has coordinates (2, –3)?

P	Q	R	S	T
A	**B**	**C**	**D**	**E**

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8. Which number is a factor of 15?

2	3	6	30	150
A	**B**	**C**	**D**	**E**

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9. Here is a shaded rectangle drawn on a centimetre grid.
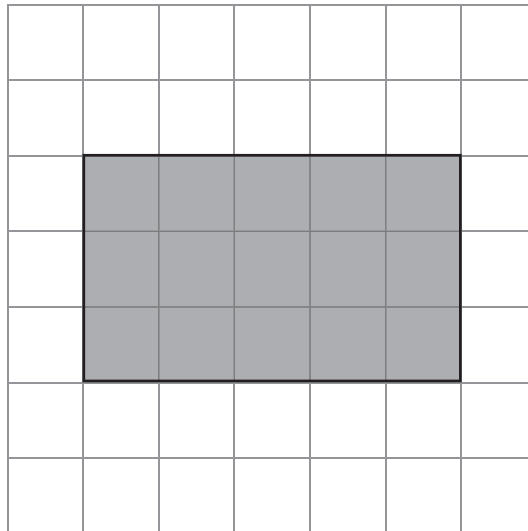
The perimeter of the shaded rectangle is

14 cm	15 cm	16 cm	8 cm	20 cm
A	**B**	**C**	**D**	**E**

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10. $6.5 - 3.37 =$

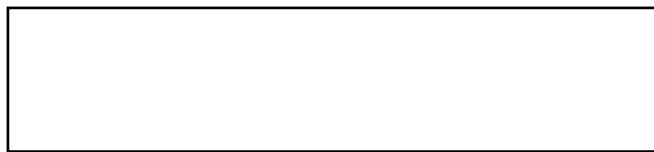| 3.13	3.27	3.17	3.38	2.83
A	**B**	**C**	**D**	**E**

---

11. One of these statements about a rectangle is **not** true.
Which one?

Opposite sides are parallel.

A

The diagonals are the same length.

B

All four angles are 90°.

C

Opposite sides are equal.

D

The diagonals cross at right angles.

E

---

12. When changed into a decimal, one of these fractions gives a recurring decimal.
Which fraction?

$\dfrac{1}{4}$ 　　$\dfrac{1}{5}$ 　　$\dfrac{1}{3}$ 　　$\dfrac{1}{10}$ 　　$\dfrac{1}{2}$

A 　　**B** 　　**C** 　　**D** 　　**E**

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13. The first three numbers in a sequence are 1   3   7

To find the next number

multiply the last number by 2
then add 1

What is the next number in the sequence?

11	13	15	30	31
A	**B**	**C**	**D**	**E**

14. Sandwiches cost £1.49 each.
Drinks cost 72p each.

What is the total cost of 1 sandwich and 2 drinks?

£1.44	£2.21	£2.70	£2.93	£3.70
A	**B**	**C**	**D**	**E**

15. How many centimetres are there in 25 metres?

250 centimetres
A

2500 centimetres
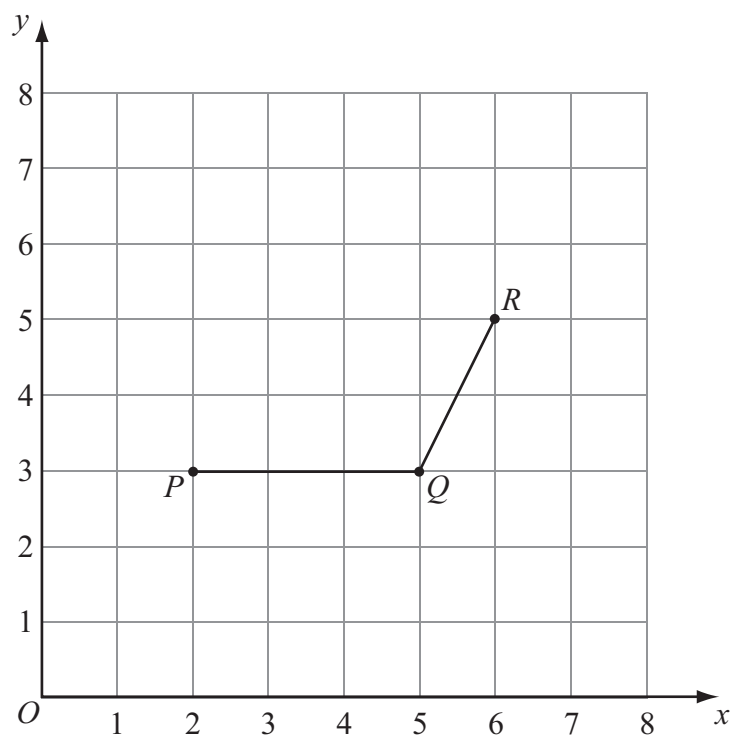**B**

25 000 centimetres
C

250 000 centimetres
D

250 000 000 centimetres
E

16.

P (2, 3), Q (5, 3) and R (6, 5) are three vertices of a parallelogram.
S is the fourth vertex.
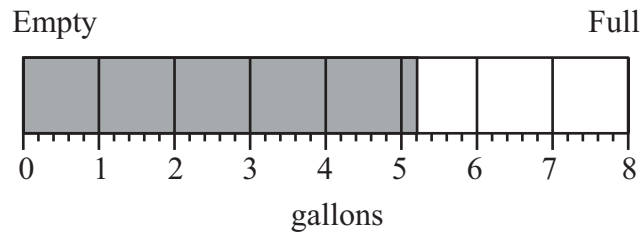
What are the coordinates of S?

(2, 5)
A

(3, 5)
B

(5, 2)
C

(5, 3)
D

(1, 5)
E

17. The diagram shows the scale on a fuel tank.

Empty   Full

0   1   2   3   4   5   6   7   8

gallons

Roger is going to fill the fuel tank completely.
How much more fuel does he need?

2.8 gallons	2.9 gallons	5.2 gallons	5.1 gallons	3.2 gallons
A	**B**	**C**	**D**	**E**

18.

Diagram **NOT**
accurately drawn

5 cm

3 cm

4 cm
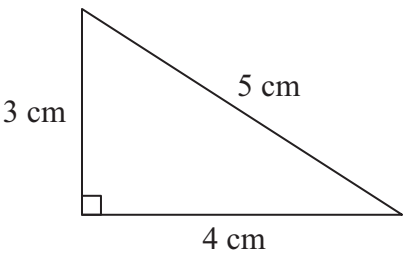
What is the area of the triangle?

6 cm^2	12 cm^2	15 cm^2	20 cm^2	60 cm^2
A	**B**	**C**	**D**	**E**

19.
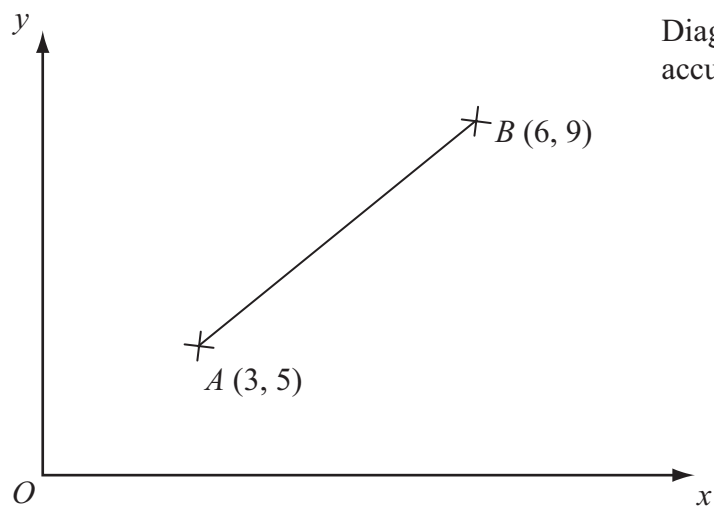
Diagram **NOT** accurately drawn

M is the midpoint of the line AB.

What are the coordinates of M?

(9, 7)	(1.5, 2)	(3, 4)	(9, 14)	(4.5, 7)
A	**B**	**C**	**D**	**E**

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20. Sam buys x pencils at 12p each and y pens at 20p each.

What is the expression for the total cost in pence?

$x + y$	$12x + y$	$12x20y$	$12x = 20y$	$12x + 20y$
A	**B**	**C**	**D**	**E**

---

21. Here are the first four terms of a sequence.

<div align="center">

1   4   9   16

</div>

The sixth term of this sequence is

<div align="center">

23	25	30	32	36
A	**B**	**C**	**D**	**E**

</div>

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22. $2\dfrac{3}{4} =$

<div align="center">

$\dfrac{23}{4}$	$\dfrac{7}{4}$	$\dfrac{11}{4}$	$\dfrac{10}{4}$	$\dfrac{5}{4}$
A	**B**	**C**	**D**	**E**

</div>

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23. Here are the first 5 terms of an arithmetic sequence.

$$-3 \qquad 7 \qquad 17 \qquad 27 \qquad 37$$

What is the expression for the *n*th term of this sequence?

$n + 10$	$10n - 3$	$10n - 13$	$-3n + 10$	$n = n + 10$
A	**B**	**C**	**D**	**E**

---

24. $6.4 \div 0.2 =$

0.32	3.2	12.8	32	128
A	**B**	**C**	**D**	**E**

25.

8 m

Diagram **NOT**
accurately drawn

9 m

5 m

10 m
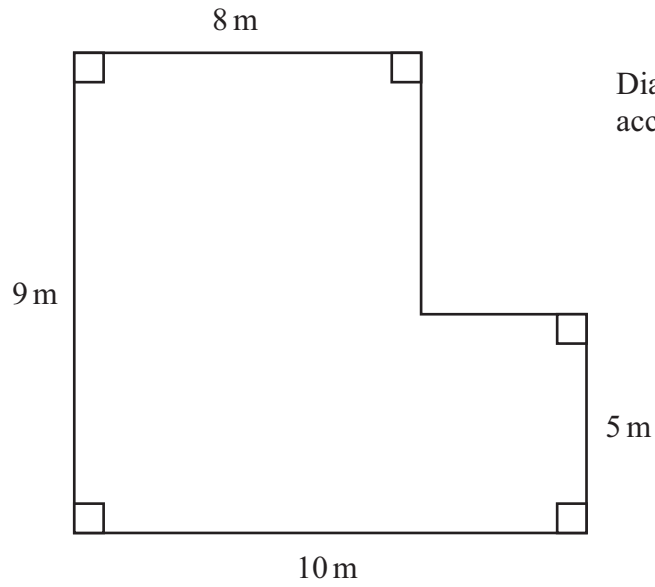
The area of this shape is

32 m²	122 m²	82 m²	97 m²	38 m²
A	**B**	**C**	**D**	**E**

TOTAL FOR PAPER: 25 MARKS

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