

Surname	Initial(s)
Signature	

Paper Reference(s)

**5382F/07**

# Edexcel GCSE

**Mathematics (Modular) – 2381**

Paper 7 (Non-Calculator)

## Foundation Tier



Unit 2 Stage 1

Monday 13 June 2011 – Afternoon

Time: 30 minutes

**Materials required for examination**

Multiple Choice Answer Sheet  
Ruler graduated in centimetres and millimetres, protractor, compasses, HB pencil, eraser.

**Items included with question papers**

Nil

### **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 12 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.

Printer's Log. No.

**P38943A**



P 3 8 9 4 3 A

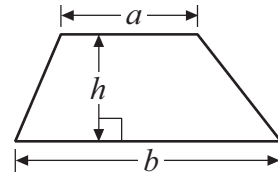
*Turn over*

# GCSE Mathematics 2381

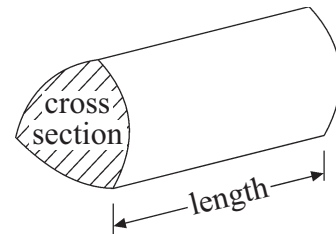
Formulae: Foundation Tier

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

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



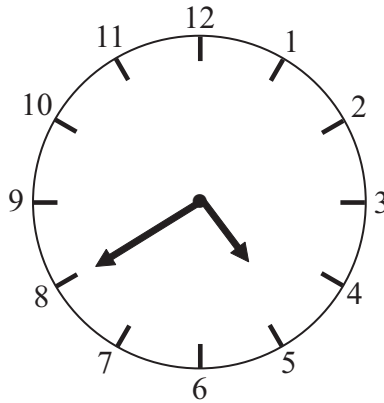
**Volume of prism** = area of cross section  $\times$  length



Answer ALL TWENTY FIVE questions using the answer sheet.

You must NOT use a calculator.

1.



What time is shown on the clock?

twenty past 8

**A**

twenty to 5

**B**

04 45

**C**

16 20

**D**

8 minutes to five

**E**

---

2. What is 942.8 rounded to the nearest whole number?

900

**A**

940

**B**

942

**C**

943

**D**

950

**E**

---

3. Which number is a multiple of 6?

2

**A**

3

**B**

16

**C**

12

**D**

15

**E**

---

4. Daniel wants to buy a magazine costing £2.30  
He only has £1.64

How much more money does he need?

£1.34

**A**

34p

**B**

66p

**C**

74p

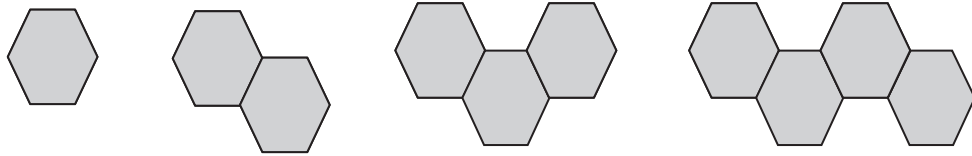
**D**

£3.94

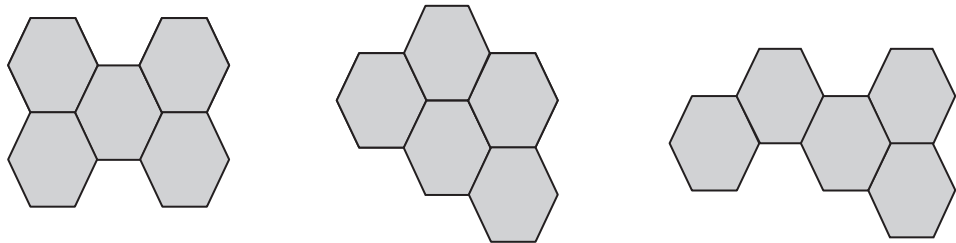
**E**

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5. Here is a sequence of patterns made from hexagons.



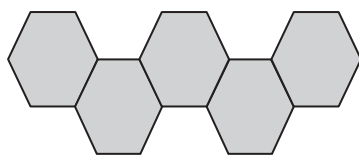
What is the next pattern in the sequence?



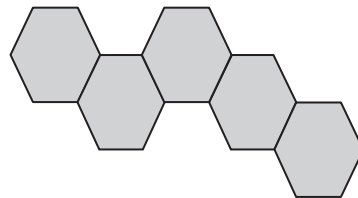
**A**

**B**

**C**



**D**



**E**

6. A TV programme starts at 17 55  
It ends at 19 10

How long is the programme?

2 hours  
45 minutes

**A**

1 hour  
55 minutes

**B**

1 hour  
45 minutes

**C**

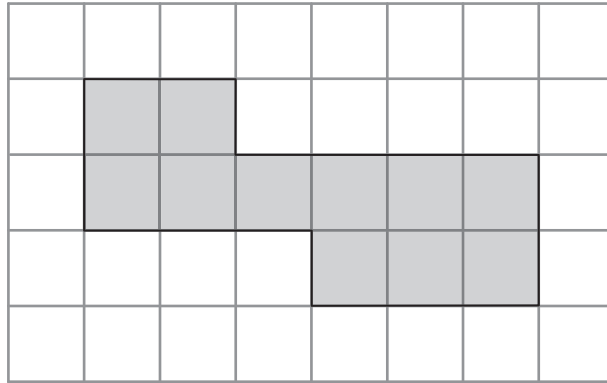
1 hours  
15 minutes

**D**

2 hours  
15 minutes

**E**

7. The diagram shows a shaded shape on a grid of centimetre squares.



What is the perimeter of the shaded shape?

22 cm

18 cm

29 cm

11 cm

40 cm

**A**

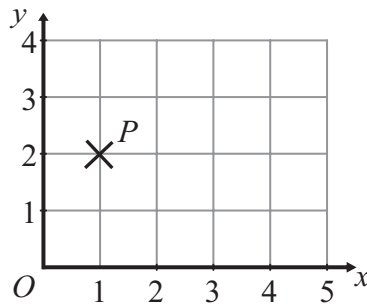
**B**

**C**

**D**

**E**

8.



The coordinates of the point  $P$  are

(1, 0)

(1, 2)

(2, 1)

(2, 0)

(2, 2)

**A**

**B**

**C**

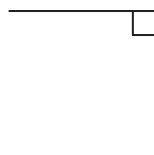
**D**

**E**

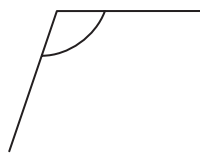
9. Which of the marked angles is a reflex angle?



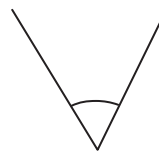
**A**



**B**



**C**



**D**



**E**

10. What number is half way between  $-2$  and  $4$ ?

- |          |          |          |          |          |
|----------|----------|----------|----------|----------|
| 3        | $-3$     | 1        | 0        | $-1$     |
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> |
- 

11. Alan is  $x$  years of age.  
Brenda is 5 years younger than Alan.

Which is the expression for Brenda's age?

- |          |          |          |          |          |
|----------|----------|----------|----------|----------|
| $x - 5$  | $5x$     | $5 - x$  | $x + 5$  | $x^5$    |
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> |
- 

12. One of these fractions is equivalent to  $\frac{2}{5}$

Which fraction?

- |                |                |                 |                 |                 |
|----------------|----------------|-----------------|-----------------|-----------------|
| $\frac{4}{20}$ | $\frac{8}{30}$ | $\frac{12}{40}$ | $\frac{30}{50}$ | $\frac{24}{60}$ |
| <b>A</b>       | <b>B</b>       | <b>C</b>        | <b>D</b>        | <b>E</b>        |
- 

13. Which of these numbers are prime numbers?

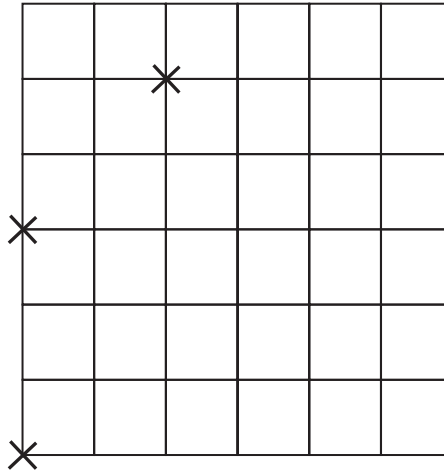
- |          |          |          |          |          |    |
|----------|----------|----------|----------|----------|----|
| 2        | 5        | 8        | 9        | 12       | 15 |
| 2 and 9  | 5 and 9  | 9 and 15 | 2 and 5  | 8 and 12 |    |
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> |    |
-

14.  $PQRS$  is a parallelogram.

$P$  has coordinates  $(0, 0)$ .

$Q$  has coordinates  $(0, 3)$ .

$R$  has coordinates  $(2, 5)$ .



The coordinates of  $S$  are

$(5, 5)$

$(2, -2)$

$(-2, 5)$

$(3, 2)$

$(2, 2)$

**A**

**B**

**C**

**D**

**E**

15. Here are the first five terms of a sequence.

$-3$

$1$

$5$

$9$

$13$

What is the 10th term of the sequence?

$26$

$17$

$33$

$37$

$41$

**A**

**B**

**C**

**D**

**E**

16. One of these statements is true for all values of  $x$ .

Which one?

$6x - x = 5$

$6x - x = 7x$

$6x - x = 6 - x$

$6x - x = 5x$

$6x - x = 6$

**A**

**B**

**C**

**D**

**E**

17. The  $n$ th term of a sequence is  $5n - 2$

What is the 4th term of the sequence?

$20$

$52$

$18$

$10$

$7$

**A**

**B**

**C**

**D**

**E**

18.  $23.5 \div 0.1 =$

0.235

**A**

235

**B**

0.0235

**C**

2350

**D**

2.35

**E**

---

19. The diagram shows a right-angled triangle.

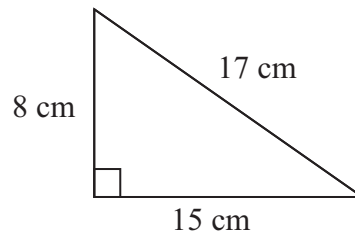


Diagram **NOT**  
accurately drawn

The area of this triangle is

40 cm<sup>2</sup>

**A**

60 cm<sup>2</sup>

**B**

120 cm<sup>2</sup>

**C**

255 cm<sup>2</sup>

**D**

68 cm<sup>2</sup>

**E**

---

20. Which is the best estimate for the value of  $\frac{3.95 \times 11.2}{0.53}$  ?

40

**A**

800

**B**

20

**C**

80

**D**

400

**E**

---

21. Given that  $2.8 \times 14.5 = 40.6$

$406 \div 0.28 =$

14500

**A**

145000

**B**

14.5

**C**

145

**D**

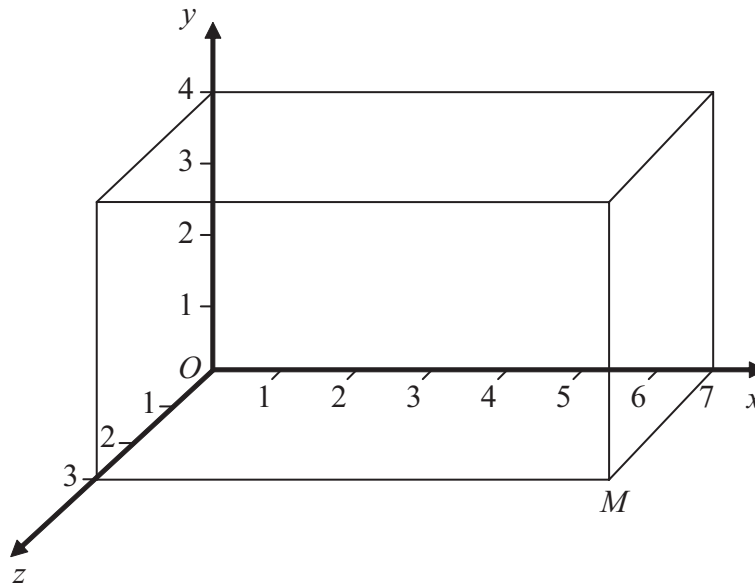
1450

**E**

---



22. Here is a cuboid drawn on a 3-D grid.  
The point  $M$  is a vertex of the cuboid.



What are the coordinates of the point  $M$ ?

- |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|
| (3, 0, 7) | (7, 3, 0) | (0, 7, 4) | (4, 3, 7) | (7, 0, 3) |
| <b>A</b>  | <b>B</b>  | <b>C</b>  | <b>D</b>  | <b>E</b>  |

23.

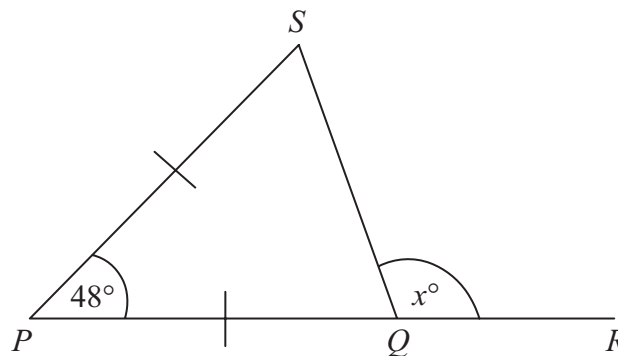


Diagram **NOT**  
accurately drawn

$PQR$  is a straight line.  
 $SPQ$  is an isosceles triangle.  
Angle  $SPQ = 48^\circ$ .

What is the value of  $x$ ?

- |          |          |          |          |          |
|----------|----------|----------|----------|----------|
| 72       | 114      | 48       | 66       | 132      |
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> |

24. Here are the first five terms of an arithmetic sequence.

2            7            12            17            22

Which is the expression for the  $n$ th term of the sequence?

$n - 3$

**A**

$5n + 3$

**B**

$n + 5$

**C**

$5n - 3$

**D**

$5n$

**E**

---

25. What are the coordinates of the midpoint of the line joining  $P(-1, 5)$  to  $Q(4, -1)$ ?

$(-2.5, 3)$

**A**

$(1.5, 2)$

**B**

$(2, 1.5)$

**C**

$(3, 4)$

**D**

$(2.5, 3)$

**E**

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**TOTAL FOR PAPER: 25 MARKS**

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