

Surname	Initial(s)
Signature	

Paper Reference(s)

**5382F/07**

# Edexcel GCSE

**Mathematics (Modular) – 2381**

Paper 7 (Non-Calculator)

## Foundation Tier



Unit 2 Stage 1

Thursday 11 June 2009 – 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.

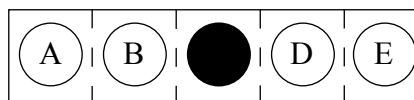
**Before the test begins:**

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 8 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.

**N33972A**



N 3 3 9 7 2 A

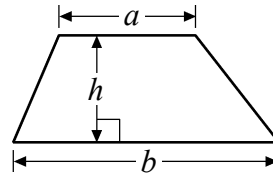
*Turn over*

## GCSE Mathematics

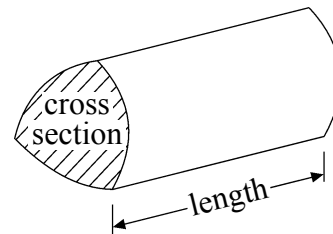
Formulae: Foundation Tier

**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 is the number four thousand eight hundred and six written in figures?

4806

**A**

4086

**B**

486

**C**

40086

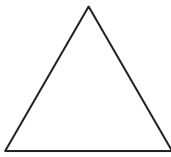
**D**

40 806

**E**

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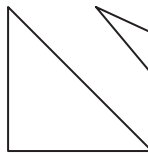
2. Which triangle is an equilateral triangle?



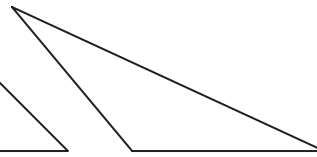
**A**



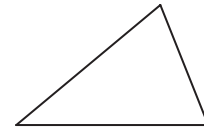
**B**



**C**



**D**



**E**

---

3. Here is a list of numbers.

84 32 162 85 60

Ben is going to write the numbers in order of size.  
He writes the smallest number first.

What number should he write next?

84

**A**

32

**B**

162

**C**

85

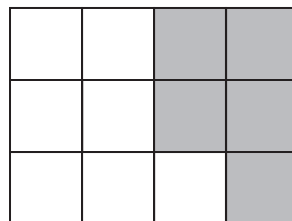
**D**

60

**E**

---

4. What fraction of the shape is shaded?



$\frac{1}{5}$

**A**

5

**B**

$\frac{5}{12}$

**C**

$\frac{5}{7}$

**D**

$\frac{7}{12}$

**E**

---

5.  $106 - 38 =$

62

**A**

72

**B**

68

**C**

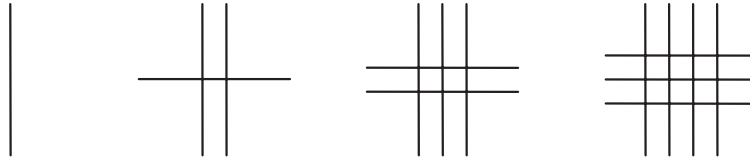
78

**D**

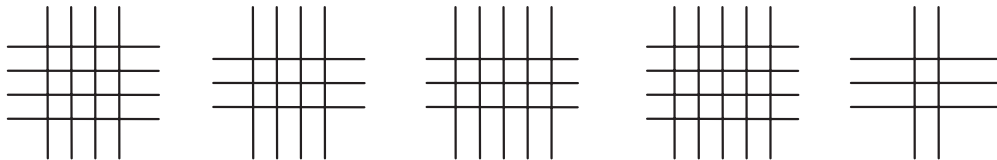
66

**E**

6. Here is a sequence of patterns made of sticks.



What is the next pattern in the sequence?



**A**

**B**

**C**

**D**

**E**

7. Here are the first 4 terms of a sequence.

1    3    7    15

The rule for this sequence is

To get the next term,  
 multiply the last term by 2  
 and add 1

What is the next term after 15?

23

**A**

31

**B**

30

**C**

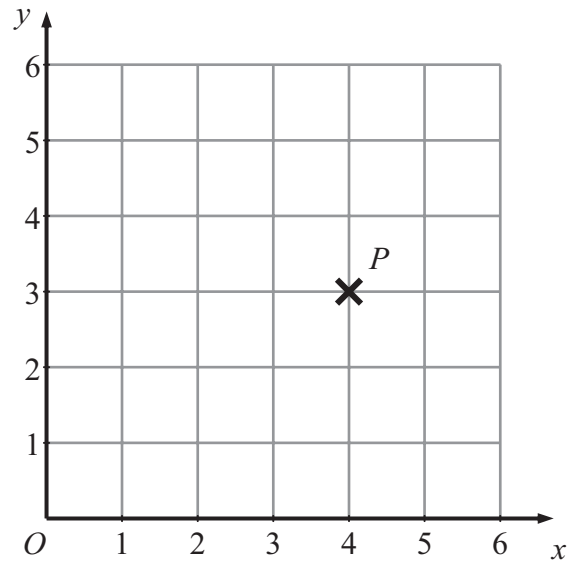
16

**D**

32

**E**

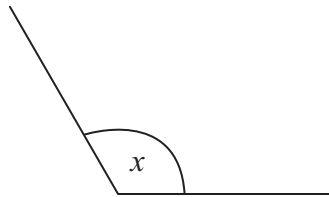
8.



The coordinates of the point  $P$  are

- |          |          |          |          |          |
|----------|----------|----------|----------|----------|
| (3, 4)   | (4, 4)   | (4, 3)   | (5, 4)   | (4, 5)   |
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> |
- 

9.



An estimate of the size of the angle  $x$  is

- |            |             |             |             |             |
|------------|-------------|-------------|-------------|-------------|
| $60^\circ$ | $120^\circ$ | $180^\circ$ | $210^\circ$ | $330^\circ$ |
| <b>A</b>   | <b>B</b>    | <b>C</b>    | <b>D</b>    | <b>E</b>    |
- 

10. Which fraction is equal to 1.17?

- |                 |                  |                   |                    |                     |
|-----------------|------------------|-------------------|--------------------|---------------------|
| $\frac{117}{1}$ | $\frac{117}{10}$ | $\frac{117}{100}$ | $\frac{117}{1000}$ | $\frac{117}{10000}$ |
| <b>A</b>        | <b>B</b>         | <b>C</b>          | <b>D</b>           | <b>E</b>            |
- 

11. What is 1.5 kilograms in grams?

- |          |           |             |            |            |
|----------|-----------|-------------|------------|------------|
| 15 grams | 150 grams | 1.500 grams | 1500 grams | 1050 grams |
| <b>A</b> | <b>B</b>  | <b>C</b>    | <b>D</b>   | <b>E</b>   |
-

12. Bill buys a cup of coffee and a sandwich.

The cup of coffee costs 95p.

The sandwich costs £1.49

What is the total cost?

£96.49

£2.49

£2.54

£2.44

£10.99

**A**

**B**

**C**

**D**

**E**

---

13. Here is a list of numbers.

1.2    1.02    1.22    2.1    2.01

What is the smallest number in the list?

1.2

1.02

1.22

2.1

2.01

**A**

**B**

**C**

**D**

**E**

---

14. Here are the first 5 terms of a sequence.

1    4    9    16    25

What is the 8th term of the sequence?

32

56

64

60

81

**A**

**B**

**C**

**D**

**E**

---

15.  $63 \times 1 + 63 \times 9 =$

630

810

3060

801

815

**A**

**B**

**C**

**D**

**E**

---

16. Which number is a factor of 28?

9

7

27

56

280

**A**

**B**

**C**

**D**

**E**

---

17. Here is a rectangle.

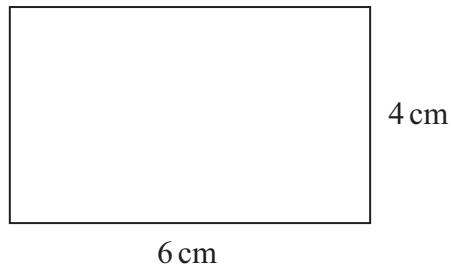


Diagram **NOT**  
accurately drawn

What is the area of the rectangle?

10 cm<sup>2</sup>

**A**

20 cm<sup>2</sup>

**B**

24 cm<sup>2</sup>

**C**

12 cm<sup>2</sup>

**D**

52 cm<sup>2</sup>

**E**

---

18. Which quadrilateral has exactly one pair of parallel sides?

Parallelogram

**A**

Rectangle

**B**

Kite

**C**

Trapezium

**D**

Rhombus

**E**

---

19. The  $n$ th term of a sequence is  $3n + 5$

What is the 6th term of the sequence?

5

**A**

14

**B**

41

**C**

23

**D**

33

**E**

---

20. What are the coordinates of the midpoint of the line joining  $P(3, 4)$  to  $Q(5, 8)$ ?

(2, 4)

**A**

(8, 12)

**B**

$\left(3\frac{1}{2}, 4\frac{1}{2}\right)$

**C**

(4, 6)

**D**

(4, 12)

**E**

---

21. Pens cost 10p each. Pencils cost 12p each.

What is an expression for the total cost, in pence, of  $x$  pens and  $y$  pencils?

$x + y$

**A**

$x = 10 + y = 12$

**B**

$12x + 10y$

**C**

$(10 + 12)xy$

**D**

$10x + 12y$

**E**

---

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

3    7    11    15    19

What is an expression, in terms of  $n$ , for the  $n$ th term of the sequence?

$n + 4$

**A**

$3n + 4$

**B**

$4n + 3$

**C**

$4n - 1$

**D**

$4n$

**E**

---

23. What is 72 written as a product of its prime factors?

$8 \times 9$

**A**

$1 \times 2 \times 2 \times 2 \times 3 \times 3$

**B**

$2 \times 4 \times 9$

**C**

$2 + 2 + 2 + 3 + 3$

**D**

$2 \times 2 \times 2 \times 3 \times 3$

**E**

---

24.  $0.64 \div 0.2 =$

3.2

**A**

0.032

**B**

0.32

**C**

12.8

**D**

1.28

**E**

---

25.

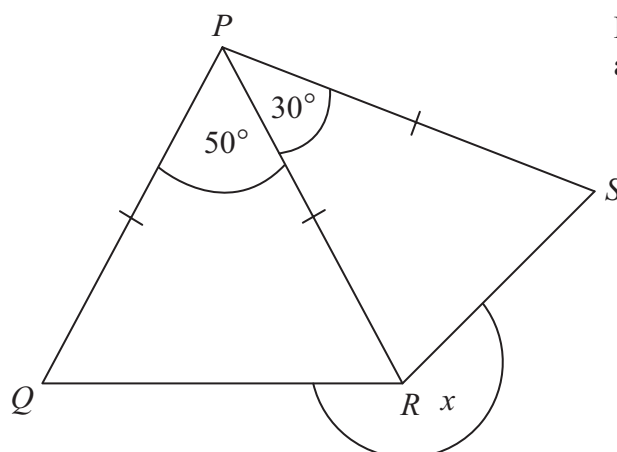


Diagram **NOT**  
accurately drawn

Triangle  $PQR$  and triangle  $PRS$  are both isosceles.

$PQ = PR = PS$ .

Angle  $QPR = 50^\circ$ .

Angle  $RPS = 30^\circ$ .

What is the size of the angle  $x$ ?

$230^\circ$

**A**

$220^\circ$

**B**

$260^\circ$

**C**

$250^\circ$

**D**

$210^\circ$

**E**

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**TOTAL FOR PAPER: 25 MARKS**

**END**