EXAMINATIONS COUNCIL OF ESWATINI
Eswatini General Certificate of Secondary Education

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER				

MATHEMATICS **6880/01**

Paper 1 Short-Answer Questions (Core) **October/November 2024**

Candidates answer on the Question Paper. **1 hour**

Additional Materials: Scientific calculator
Geometrical instruments
Tracing paper (optional)

READ THESE INSTRUCTIONS FIRST

Write your centre number, candidate number and name in the spaces provided.
Write in dark blue or black pen in the spaces provided on the Question Paper.
You may use a soft pencil for any diagrams or graphs.
Do **not** use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

All working should be clearly shown below that question.
The number of marks is given in brackets [ ] at the end of each question **or** part question.

Scientific calculators should be used.
If the degree of accuracy is not specified in the question, and if the answer is not exact, give the answer to three significant figures.
Give answers in degrees to one decimal place.
For π, use either your calculator value or 3.142.

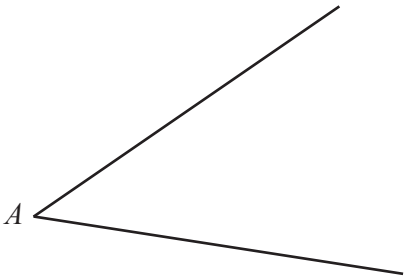
The total of the marks for this paper is 60.

For Examiner's Use	
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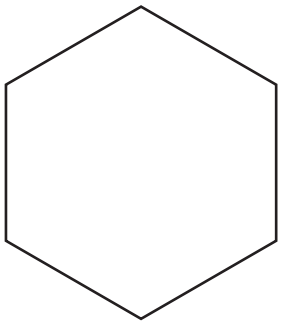
1 Measure the reflex angle A.



Answer ..... ° [2]

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2 The diagram below shows a regular hexagon.



(a) Draw all the lines of symmetry on the diagram. [2]

(b) State the order of rotational symmetry of the hexagon.

Answer (b) ..... [1]

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3 On a particular morning, the temperature of a town was −7 °C.

At noon the temperature had risen by 5 °C.

Find the temperature at noon.

Answer ..... °C [1]

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4 Without using your calculator, work out $\frac{5}{7} + \frac{2}{3}$.

Show all your working and give your answer as a mixed number.

Answer ..... [3]

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5 A school buys 700 exercise books.

18% of the exercise books are issued to the Form 1 class.

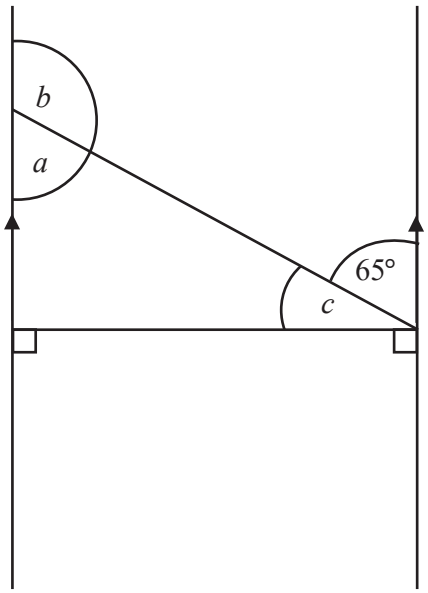
$\frac{2}{7}$ of the exercise books are issued to the Form 4 class.

Calculate the number of exercise books that are **not** issued.

Answer ..... [3]

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6



Find angles a, b and c.

Answer $a =$ ....., $b =$ ....., $c =$ ..... [3]

---

7 Here is a list of numbers.

7 3 7 5 3 4 5 5 10 5

(a) Calculate the mean.

Answer (a) ..... [2]

(b) Find the range.

Answer (b) ..... [1]

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8 A letter is chosen at random from the word below

E S W A T I N I

Find the probability that the letter is

(a) not **I**,

Answer (a) ..... [1]

(b) **K**.

Answer (b) ..... [1]

---

9 **(a)** Write 273 correct to the nearest 50.

Answer (a) ..... [1]

(b) Evaluate $\sqrt[3]{(-6)^2 \times 3.5}$.

Answer (b) ..... [2]

---

10 **(a)** State the number of terms in the expression

$$x^2 + 2xy - 3z + 5.$$

Answer (a) ..... [1]

(b) Factorise

(i) $2xy - 4x^2$,

Answer (b)(i) ..... [2]

(ii) $x^2 - 2x - 15$.

Answer (b)(ii) ..... [2]

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11 You are given that

$$f(x) = 2x - 1.$$

(a) Evaluate f(2).

Answer (a) ..... [1]

(b) Find x when $f(x) = -10$.

Answer (b) $x =$ ..... [2]

---

12 Solve

(a) $\frac{x+7}{3} = 5$,

Answer (a) $x =$ ..... [2]

(b) $2a + 8 \geq 0$.

Answer (b) ..... [2]

---

13 Vuyo deposits E1200 into a bank account for 7 years.

The bank pays **compound** interest at a rate of 4.2% per annum.

Calculate how much will be in his account at the end of 7 years.

Answer E ..... [3]

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14 Find the value of x when

(a) $9^x \times 9^3 = 9^8$,

Answer (a) $x =$ ..... [1]

(b) $63^4 \div 63^7 = 63^x$.

Answer (b) $x =$ ..... [1]

---

15 Mandla, Zodwa and Inathi share E650 in the ratio 8 : 3 : 2.

Calculate the amount Zodwa receives.

Answer E ..... [2]

---

16 A solid cuboid has dimensions 13 m by 16 m by 22 m.

(a) Find the volume of the cuboid.

Answer (a) ..... m^3 [1]

(b) Find the total surface area of the cuboid.

Answer (b) ..... m^2 [3]

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[Turn over

17 **(a)** Write the number 398 000 000 in standard form.

Answer (a) ..... [1]

(b) Write 7.12×10^{-4} as an ordinary number.

Answer (b) ..... [1]

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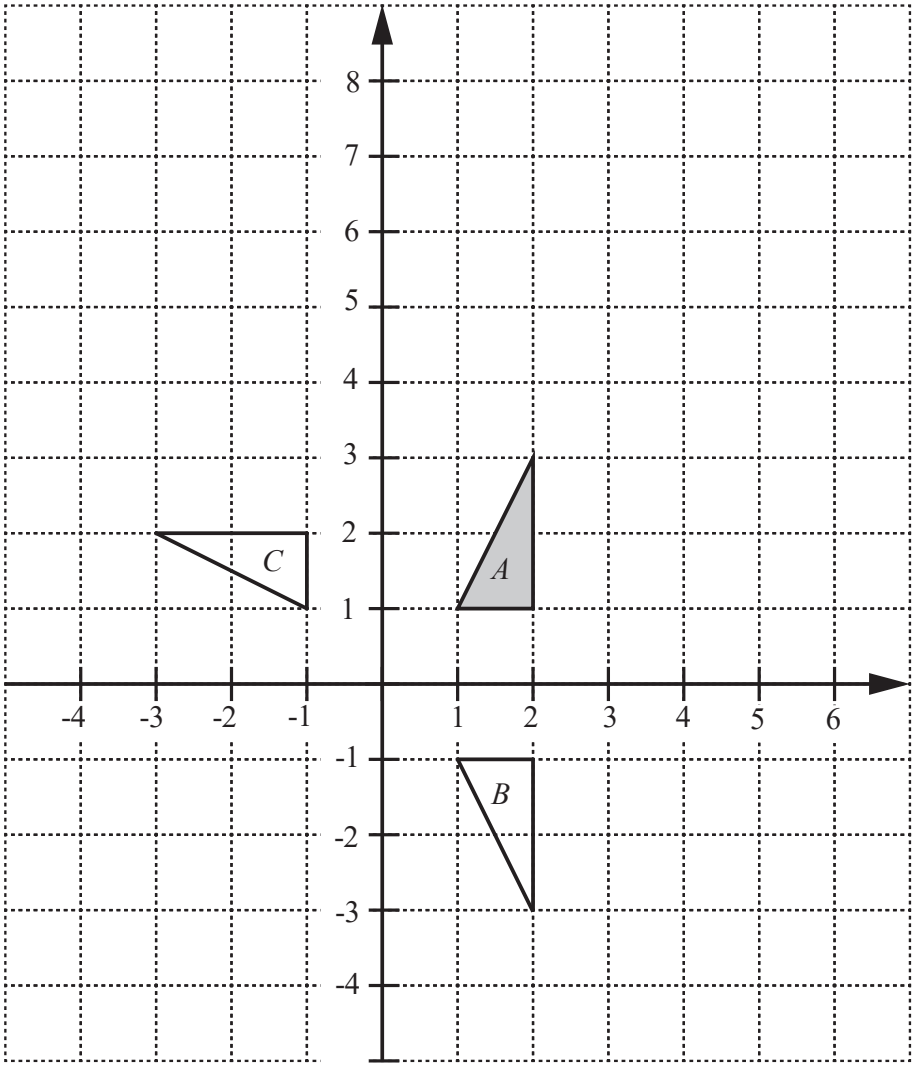
18 The interior angle of a regular polygon is 150°.

Find the number of sides for this polygon.

Answer ..... [2]

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19



(a) Triangle D is the image of A after an enlargement about the origin, scale factor 2.

Draw and label triangle D. [2]

(b) Describe the single transformation that maps triangle A onto:

(i) triangle B,

.....

..... [2]

(ii) triangle C.

.....

..... [3]

20 $v = 2c + 3$

(a) Rearrange the formula to make c the subject.

Answer (a) ..... [2]

(b) Calculate the value of c when $v = 3$.

Answer (b) ..... [1]

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