DO NOT WRITE ABOVE THIS LINE

Name: _________________________________ Class: ________________

Instructions to Candidates

• Answer all questions.

• This paper carries a total of 25 marks.

• Calculators and protractors are NOT allowed.
1. Work out:
   (a) $735 + 214 - 113$

   Ans: ____________________

   (b) $9 \times 7$

   Ans: ____________________

   (c) $500 \times 100$

   Ans: ____________________

   (d) $2 + 4 \times 3$

   Ans: ____________________

   (5 marks)

2. Work out:
   (a) $9.8 + 2.5$

   Ans: ____________________

   (b) $42.9 \div 3$

   Ans: ____________________

   (3 marks)
3.  
(a) Convert: 3 kilometres = _________ metres

Use your answer to work out: 3 km – 100 m

Ans: _________________ m

(b) Chairs in a hall are arranged in 55 rows and 25 columns. How many chairs are there?

Ans: _________________ chairs

(4 marks)

4.  
Evaluate:

(a) \(33 + (-3)\)

Ans: _________________

(b) \((-33) - 3\)

Ans: _________________

(2 marks)

5.  
Express:

(a) \(\frac{9}{10}\) as a decimal

Ans: _________________

(b) \(\frac{19}{20}\) as a percentage

Ans: _________________ %

(2 marks)
6. (a) (i) Write down all the factors of 24.

 Ans: __________________________________________

(ii) Which of the above factors are square numbers?

 Ans: ______________________

(b) List all the multiples of 5 between 9 and 29.

 Ans: ______________________

(c) Write 72 as a product of prime factors.

 Ans: ______________________

(7 marks)

7. (a) Work out \( \frac{4}{7} + \frac{1}{7} \).

 Ans: ______________________

(b) Calculate \( \frac{1}{5} \) of 325 kg.

 Ans: ______________________ kg

(2 marks)

END OF NON CALCULATOR PAPER
1. (a) Put these numbers in order, starting from the smallest:

\[-1, \ 7, \ -7, \ 8, \ 5, \ -13\]

Ans: ________________________________

(b) Write 6923.5 correct to:

(i) the nearest 100

Ans: ________________________________

(ii) the nearest whole number

Ans: ________________________________

(c) Write down the value of 5 in each of the following numbers:

(i) 7258

Ans: ________________________________

(ii) 5278

Ans: ________________________________
2. (a) Calculate: \(500 \text{ m} + 800 \text{ m} + 250 \text{ m} - 125 \text{ m}\)

\[\text{Ans: } \underline{\phantom{00000}} \text{ m}\]

(b) How many \textbf{minutes} are there in 1.5 hours?

\[\text{Ans: } \underline{\phantom{00000}} \text{ minutes}\]

(c) \textbf{Simplify} \(8 \text{ ml} : 36 \text{ ml}\)

\[\text{Ans: } \underline{\phantom{00000}} : \underline{\phantom{00000}}\]

(d) \textbf{Fill in:} The scale 1 cm to 3 m can be written as

\[1 : \underline{\phantom{000}}\]

(6 marks)

3. (a) What weight is shown by the arrow on the scale?

\[\text{Ans: } \underline{\phantom{000}} \text{ kg}\]

(b) Draw an arrow on the scale to show an estimate of 2.8 kilograms.

(2 marks)
4. (a) Which of the following are regular shapes? Underline the correct answers.

square   rectangle   kite   trapezium   equilateral triangle

(b) **Match** each shape with its name.

(c) The pattern below is made up of 1 big circle with radius **4 cm** and 2 smaller circles with radius **2 cm each**. Draw accurately this pattern in the space below.
5. A bag contains 10 marbles, numbered 1 to 10. A marble is chosen at random from the bag. Describe the following events as certain, impossible, likely or unlikely.

The probability of getting:

(a) a 3
Ans: ____________________

(b) an 11
Ans: ____________________

(c) a number less than 11
Ans: ____________________

(3 marks)

6. (a) Write down a possible rule for this number machine.

Rule: ____________________________________________

(b) Work out the input for the following number machine.

Ans: ____________________

(c) Use the formula \( C = 5(p + 10) \) to find the value of \( C \) when \( p = 5 \).

Ans: ____________________

(6 marks)
7. (a) Use **ruler and compasses only** to construct triangle ABC where AB = 4 cm, BC = 6 cm and AC = 7.8 cm. Side AC has been done for you.

(b) Can all the three angles of a triangle be **acute**? Explain your answer by giving an example.

8. The number of dresses sold in 9 days from a shop are found below:

   14  12  14  8  8  14  14  14  10

(a) Find the **mean** number of dresses.

    Ans: ______________________

(b) Find the **median**.

    Ans: ______________________

(4 marks)
9. (a) Draw an angle of 135°.

(b) Write the value of each lettered angle in the following diagrams.

\[ a^\circ = \underline{\hspace{2cm}} \quad \]
\[ b^\circ = \underline{\hspace{2cm}} \quad \]
\[ c^\circ = \underline{\hspace{2cm}} \quad \]
\[ d^\circ = \underline{\hspace{2cm}} \quad \]
\[ e^\circ = \underline{\hspace{2cm}} \quad \]

(9 marks)
10. The bar chart below shows the results obtained by Form 1 students in a Mathematics examination.

(a) How many students sat for the examination?

Ans: _______________ students

(b) Liam said that more than half of the students scored low marks (Grade D and Fail). Give a reason to show why he is wrong.

_____________________________________________________________________________

_____________________________________________________________________________

_____________________________________________________________________________

(4 marks)

11. (a) Find the value of \( x - y \) when \( x = 23 \) and \( y = 15 \).

Ans: ______________________
(b) Write the next two terms:

(i) 2, 5, 8, 11, _____, _____.
(ii) 13, 11, 9, 7, _____, _____.

(c) The balance below shows 3 weights, in kilograms, and a cylinder. Find the weight of the cylinder.

Ans: ____________________ kg

(6 marks)

12. Jude wants to draw parallelogram PQRS. Two sides, PQ and QR, are drawn on the grid below.

(a) Write down the coordinates of point Q.

Q = ________________

(b) Complete the parallelogram PQRS by drawing two more lines on the above grid.

(3 marks)
13. (a) \[ A \quad B \]

(i) Choose the net of a cube:

Shape ________ is the net of a cube.

(ii) Choose the net of a cuboid:

Shape ________ is the net of a cuboid.

(b) The following shape is made up of 1 centimetre squares. Find the area of this shape.

Ans: ________________ cm\(^2\)

(c) Calculate the \textbf{volume} of the following shape:

Ans: ________________ m\(^3\)

(8 marks)
14. (a) Fill in:

\[ \begin{align*}
\text{12} & \quad \text{18} & \quad \text{30} \\
\end{align*} \]

(b) A line passes through the points \((-3, -6), (-1, -2)\) and \((2, 4)\).

(i) Plot the points on the above grid and join them to form a straight line.

(ii) Find the equation of the line.

Ans: ________________

(6 marks)