



FORM 4

MATHEMATICS
Non-Calculator Paper

TIME: 20 minutes

Mark

DO NOT WRITE ABOVE THIS LINE

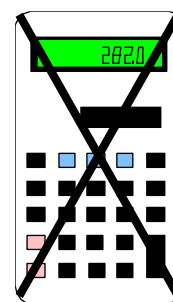
Name: _____

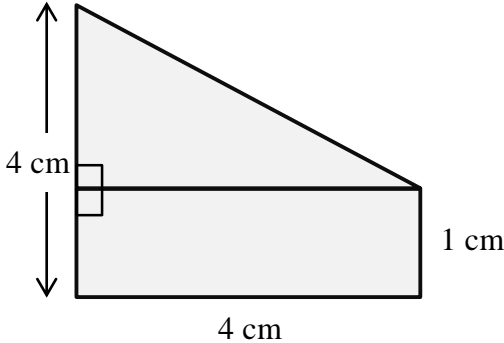
Class: _____

INSTRUCTIONS TO CANDIDATES:

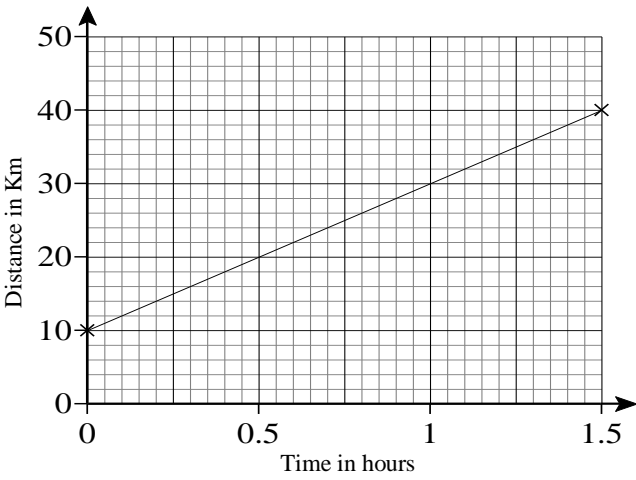
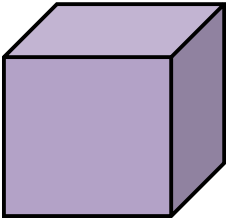
Read all the questions carefully before you start answering.

- Answer all questions.
- This paper carries 20 marks.
- **Calculators, protractors** and other mathematical instruments are **NOT ALLOWED**.
- You are not required to show your working. However, space for working is provided if you need it.



No.	Question	Space for working if required
1.	Express $\frac{145}{200}$ as a fraction in its lowest terms. Ans: _____	
2.	Work out: $\frac{2}{5} + 2\frac{1}{3} - 1\frac{1}{2}$ Ans: _____	
3.	Estimate: $\left(\frac{5.91 \times 6.16}{8.86}\right)^2$ Ans: _____	
4.	Write 6.7×10^{-3} as an ordinary number. Ans: _____	
5.	Find the value of $3a^2 - 2b$ when $a = 2$ and $b = -6$. Ans: _____	
6.	The shape below is made up of a rectangle and a right-angled triangle. Find its perimeter.  Ans: _____ cm	

7.	<p>Arrange in order, starting from the smallest:</p> $\frac{20}{7}, \pi, 2.4, -2$ <p>Ans: _____</p>	
8.	<p>Evaluate:</p> $10 + 2(8 - 3)$ <p>Ans: _____</p>	
9.	<p>Write down the 10th term in the sequence:</p> $t, \frac{t^3}{2}, \frac{t^5}{3}, \frac{t^7}{4}, \dots$ <p>Ans: _____</p>	
10.	<p>The circumference of a circle is 30 cm. Estimate the value of its radius. (<i>Hint: Take π as 3</i>).</p> <p>Ans: $r =$ _____ cm</p>	
11.	<p>Simplify:</p> $\frac{24 - 2n}{2}$ <p>Ans: _____</p>	
12.	<p>Expand and simplify:</p> $(3x^4)^2$ <p>Ans: _____</p>	
13.	<p>On a plan, the length of a room is 2.75 cm. The plan has a scale of 1 cm : 2 m. Find the real length of the room.</p> <p>Ans: _____ m</p>	
14.	<p>Write down a fraction that lies between 0.4 and 0.7.</p> <p>Ans: _____</p>	

15.	<p>Make x the subject of the formula:</p> $ax + 7 = b$ <p>Ans: $x =$ _____</p>	
16.	<p>Write down all the prime numbers between 20 and 35.</p> <p>Ans: _____</p>	
17.	<p>Which of the numbers below is equal to 2^{-1}?</p> <p>A. 5×10^{-1} B. 0.2 C. $\frac{2}{10}$</p> <p>Ans: _____</p>	
18.	<p>The distance-time graph shows the road trip of a motorcyclist during his journey to work.</p>  <p>What is his average speed?</p> <p>Ans: _____ km/hr</p>	
19.	<p>A prism has a volume of 225 cm^3. Its cross-sectional area is 25 cm^2. Find the length of the prism.</p> <p>Ans: _____ cm</p>	
20.	<p>Find the total surface area of a cube of sides 10 cm.</p>  <p>Ans: _____ cm^2</p>	