



FORM 4

MATHEMATICS
Non-Calculator Paper

TIME: 20 minutes

Mark

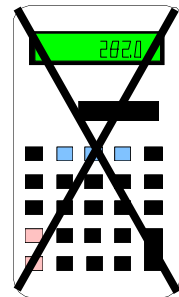
DO NOT WRITE ABOVE THIS LINE

Name: _____

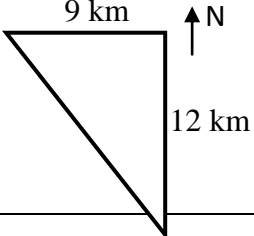
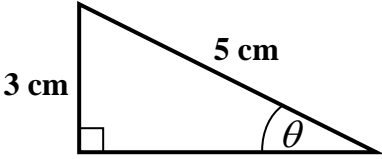
Class: _____

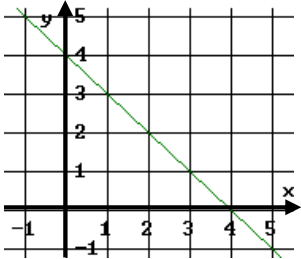
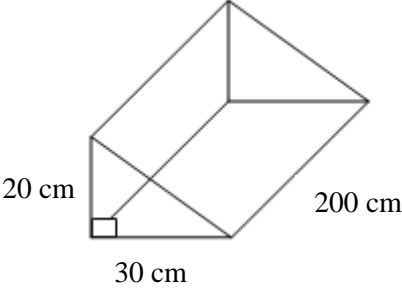
INSTRUCTIONS TO CANDIDATES:

- Answer all questions.
- This paper carries 20 marks.
- **Calculators and protractors are NOT ALLOWED.**



No.	Question	Space for working, if required
1	Find the missing number $3^{\square} \times 3 = 3^{10}$ Ans: _____	
2	Write down all the prime numbers between 15 and 30. Ans: _____	
3	Estimate the value of: 27.8×9.3 Ans: _____	
4	Sandra planted 80 pumpkin seeds, but only 20 of them grew into plants. What fraction of the seeds grew? Give your answer in its simplest form. Ans: _____	
5	A recipe uses 25 g of flour to make 10 biscuits. How many biscuits can be made from 1kg of flour? Ans: _____	
6	Find the value of x if $4^x = 64$ Ans: _____	
7	Write down the value of b given that: $6.2 \times 10^b = 0.00000062$ Ans: _____	

8	Simplify: $xy - y^2 + 5xy + 3y^2 - 2$ Ans: _____	
9	Which of the following is equivalent to $2k^2 + 6k$ A. $2(k^2 + 6k)$ B. $2k(k + 3k)$ C. $2k(k + 3)$ D. $6(2k^2 + k)$ Ans: _____	
10	Make p the subject of the formula: $m = 3p + 2$ Ans: _____	
11	A plane flies 12 km due north of a runway, then changes course and flies 9 km west. How far is the plane from the runway?  Ans: _____ km	
12	Write down the value of $\sin \theta$.  Ans: _____	
13	Estimate the circumference of circle whose diameter is 10 cm. Ans: _____ cm	
14	The base of a triangle is 8 cm. The height is 6 cm. What is the area of the triangle? Ans: _____ cm^2	

<p>15</p>	<p>Which of the equations below describe the straight line graph shown in the diagram?</p> <p>A. $y = x + 4$</p> <p>B. $x + y = 4$</p> <p>C. $y = x - 4$</p> <p>D. $y = 4x$</p>  <p>Ans: _____</p>	
<p>16</p>	<p>A cuboid with breadth 3 cm and height 5 cm has a volume of 150 cm^3. What is the length of the cuboid?</p> <p>Ans: _____ cm</p>	
<p>17</p>	<p>Work out the volume of this solid.</p>  <p>Ans: _____ cm^3</p>	
<p>18</p>	<p>Use the information given below to determine the value of 13.8×536.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> $1.38 \times 536 = 739.68$ </div> <p>Ans: _____</p>	
<p>19</p>	<p>Work out the value of the expression given below, giving your answer as an ordinary number</p> $5^{-1} \times 1250$ <p>Ans: _____</p>	
<p>20</p>	<p>Which two of the following numbers have the same value?</p> <p>$\frac{2}{3}$, 66% , $0.\dot{6}$, 6.7</p> <p>Ans: _____</p>	