



FORM 3

MATHEMATICS  
Non-Calculator Paper

TIME: 30 minutes

<b>Question</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>Total</b>
<b>Mark</b>									

**DO NOT WRITE ABOVE THIS LINE**

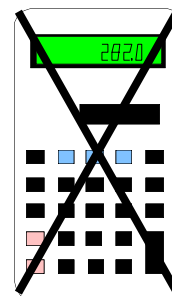
Name: \_\_\_\_\_

Class: \_\_\_\_\_

**INSTRUCTIONS TO CANDIDATES:**

**Read all the questions carefully before you start answering.**

- Answer all questions.
- This paper carries 25 marks.
- **Calculators, protractors** and other mathematical instruments are **NOT ALLOWED**.
- On your desk you should have nothing except for **pen, pencil, ruler** and the **examination paper**.



1. Work out  $5\frac{1}{3} + \left(3\frac{3}{5} \div \frac{3}{5}\right)$ . Give your answer as a **mixed fraction** in its simplest form.

Answer: \_\_\_\_\_

(4 marks)

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2. The circumference of the earth is **40,075,000** m.

- i) Round this number correct to **4 significant figures**.



Answer: \_\_\_\_\_ m

- ii) Write your answer in part i) in **standard form**.

Answer: \_\_\_\_\_ m

(2 marks)

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3. 2 people take 3 hours 30 mins to paint a room. How long does it take 3 people to paint the same room? *Assume that everyone works at the same rate.*

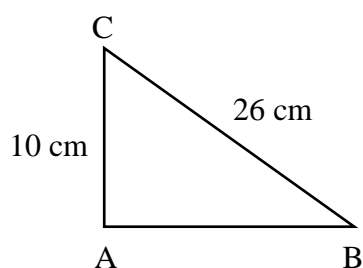


Answer: \_\_\_\_\_

(2 marks)

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4. What is the length of AB?



AB = \_\_\_\_\_ cm

(1 mark)

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5. The formula for finding the simple interest is  $I = \frac{PTR}{100}$

i) Make R the subject of the formula.

R = \_\_\_\_\_

ii) Mark invests €9000 for 24 months earning a simple interest of €450.  
What is the **rate** of investment?

Answer: \_\_\_\_\_ %

(5 marks)

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6. Continue the following procedure to draw a regular **decagon** (10 sides). Each side has a length of 40 turtle steps.

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PD
REPEAT ____ [FD ____ RT ____]
END
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(3 marks)

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7. The following are the temperatures for the first 10 days of January:

9°C 5°C 5°C 6°C 9°C 9°C 7°C 5°C 8°C 8°C.

Work out the **mode/s** and the **median**.

Mode/s \_\_\_\_\_ °C

Median \_\_\_\_\_ °C

(3 marks)

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8. i) Simplify completely  $\frac{4y^3+8y^2}{2y^2+4y}$ .

Answer: \_\_\_\_\_

ii) Solve  $4(x + 3) - 2(x - 3) = 6$

x = \_\_\_\_\_

(5 marks)

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**END OF NON CALCULATOR PAPER**