DEPARTMENT FOR CURRICULUM,
LIFELONG LEARNING AND EMPLOYABILITY
Directorate for Learning and Assessment Programmes
Educational Assessment Unit

Track 3

Annual Examinations for Middle Schools 2023

YEAR 8 **MATHEMATICS** **TIME: 30 minutes**
Non-Calculator Paper

Question	1	2	3	4	5	6	**Total**
Mark							

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.
- All necessary working must be shown.

1. Simon cleans his bike every 25 days while Amy cleans her bike every 30 days. Simon and Amy clean their bike together today. After how many days will they clean their bike together on the same day?

Ans: _____

(3 marks)

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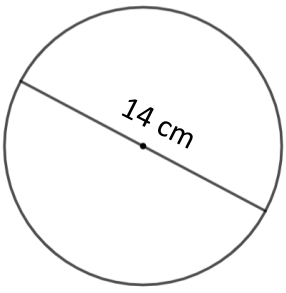
2. a) Work out, giving your answer as a **mixed number**:

$$2\frac{2}{3} + 3\frac{1}{5}$$

Ans: _____

b) Use $\pi = \frac{22}{7}$ to estimate the circumference of a circle with diameter 14 cm.



Ans: _____

(6 marks)

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3. a) Work out:

$$\sqrt{81} \times (-4 - 6)$$

Ans: _____

b) Given that $c = 5d + 3e + de$, find the value of c when $d = -6$ and $e = 4$.

Ans: _____

(4 marks)

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4. a) Simplify:

$$4 : 4.8$$

Ans: _____

b) i) The distance on the map between village A and village B is 8.4 cm. Use a scale of 1 cm : 3 km to work out the actual distance in km.

Ans: _____

ii) Paula drives between village A and village B at a constant speed of 50 km in 1 hour. Estimate the time she takes to travel between the two villages. Give your answer in minutes.

Ans: _____

(5 marks)

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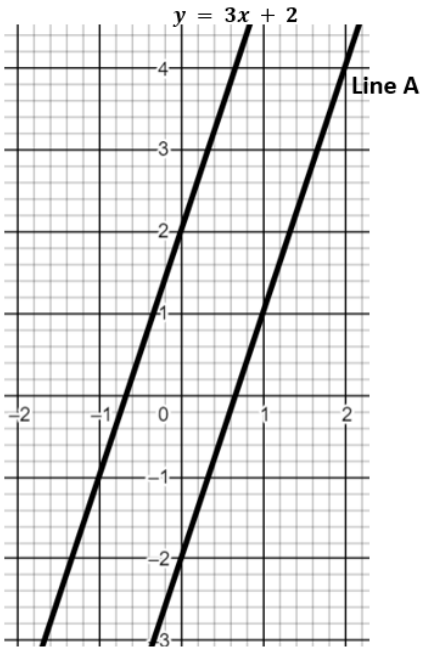
5. a) The graph shows the line $y = 3x + 2$.



Line A is parallel to the line $y = 3x + 2$.

Write down the equation of line A.

Ans: _____

b) Does the line $y = 3x + 2$ pass through the point $(-2, -7)$?

Show all necessary working and underline the correct answer.

Ans: Yes / No

(4 marks)

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6. Look at the diagram below.

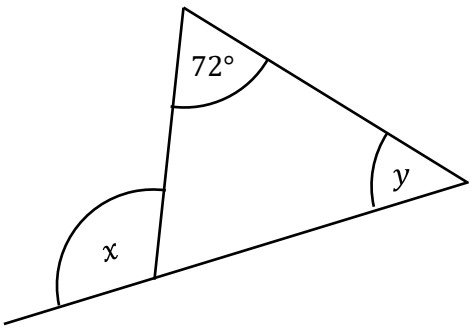

Diagram not drawn to scale

a) Angle x is called the _____ angle of the triangle.

b) Angle x is 117°. Calculate the size of angle y.

Ans: _____

(3 marks)

End of Non-Calculator Paper