



Kulleġġ San Nikola Sekondarja Subien Naxxar
St Nicholas College Boys Secondary Naxxar
Half-Yearly Examinations February 2015

**Track
3**

FORM 3

MATHEMATICS
Non-Calculator Paper

TIME: 30 minutes

Question	1	2	3	4	5	6	7	8	9	10	11	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. Evaluate $4^{-2} \times 4^2$

Ans _____

(2 marks)

2. Simplify the following:

(i) $(-4x) \times (-10xy) =$

Ans: _____

(ii) $4\pi^3 + 6\pi^2 =$

Ans: _____

(4 marks)

3. Write :

(i) 272.8 in **standard form**: _____

(ii) 0.568 as a **percentage**: _____

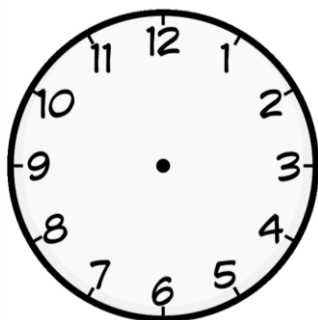
(2 marks)

4. Make y the subject of the formula: $8y - 2 = 5x - 8$

Ans: $y =$ _____

(2 marks)

5.



If the circumference of the clock shown is 60 cm, find the length of arc travelled between the **hands** at 4 o'clock.

Ans: _____ cm^2

(2 marks)

6. If $p = -7$ and $q = -3$, what is the value of $5 + 2p + 3q$?

Ans: _____

(2 marks)

7. Find the **sum of the interior angles** in **two** right-angled triangles and **two** parallelograms.

Ans: _____

(2 marks)

8. (i) Simplify the ratio $8 : 40 : 56$

Ans: _____

(ii) Divide €3200 in the ratio $5 : 11$

Ans: € _____ , € _____

(3 marks)

9. A family made of **four** members has enough groceries for 30 days.

If one guest comes and stays with them, how many days will the groceries last?

Ans: _____ days

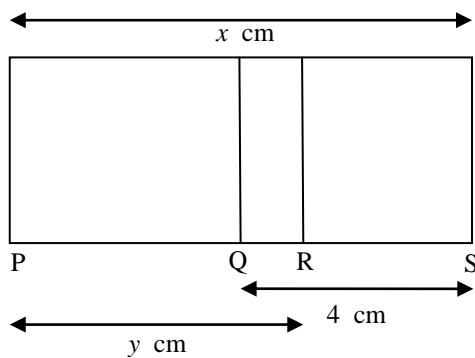
(2 marks)

10. Work out $5\frac{1}{3} \times 2\frac{1}{2} \div 2\frac{2}{7}$

Ans: _____

(2 marks)

11. The length RS in terms of x and y is:



- (A) $(x + y)$ cm
- (B) $(y + 4)$ cm
- (C) $(x - y)$ cm
- (D) $(4 - x)$ cm

Ans: _____

(2 marks)

END OF NON-CALCULATOR PAPER