

MINISTRY OF EDUCATION, HERITAGE & ARTS

WORKSHEET1 YEAR 13 2021

TECHNICAL DRAWING

STRAND 1 : GEOMETRY

NAME: _____

SECTION B

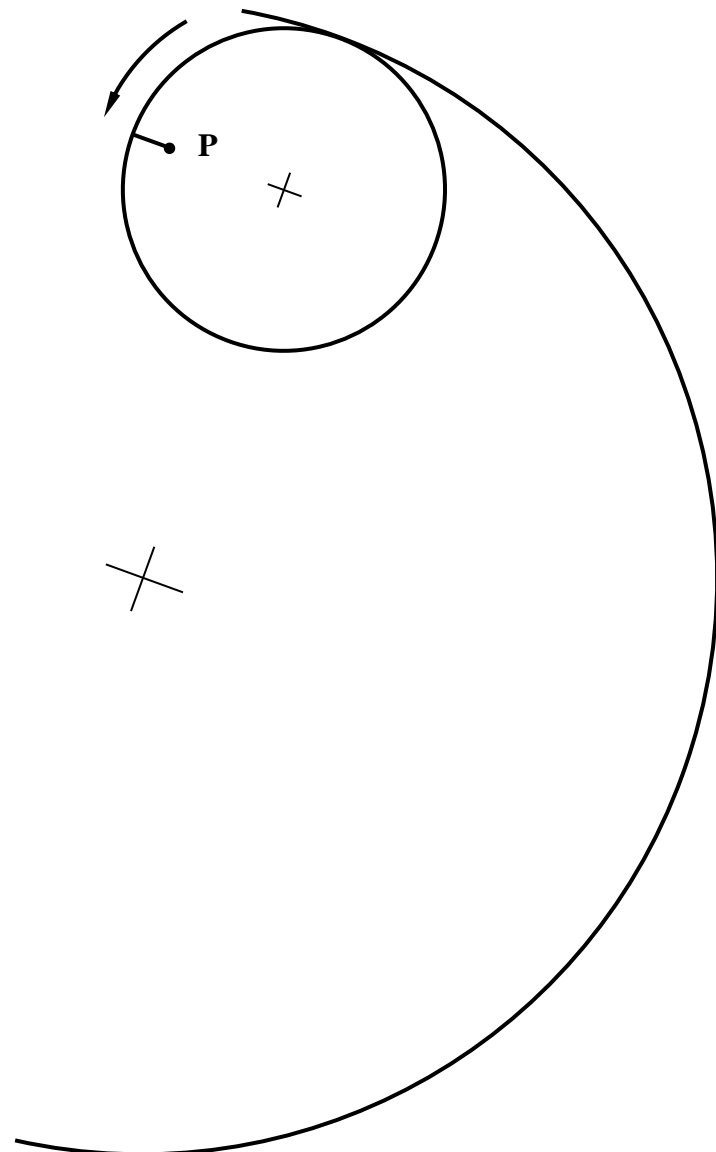
QUESTION 1

PART A

Given: A rolling circle moving along a curved path in an anti-clockwise direction.

Required: Draw the locus of point **P** inside the rolling circle for ½ revolution.

Name the curve formed: _____



(15 marks)

(7 marks)

(6 marks)

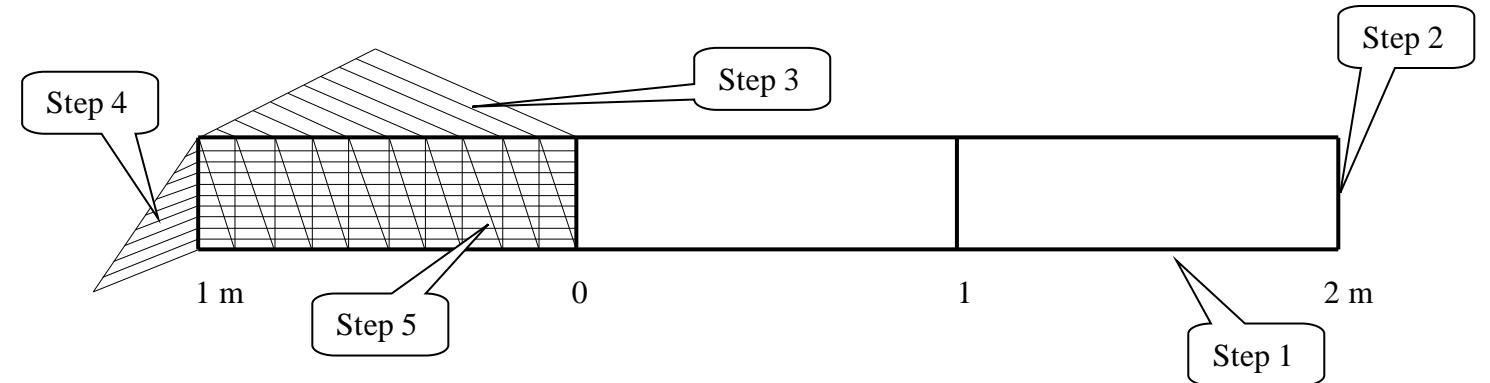
(1 mark)

BQ4A			
1	Correct division of circle	1	
2	Correct divisions on rolling circle and labels shown	1	
3	Correct generating lines or method	1	
4	Accuracy of C ₁ to C ₆ locations	1	
5	Accuracy of P ₁ to P ₆ locations	1	
6	Correct shape of locus	1	
7	Correct name of the curve	1	
BQ4B			
8	Correct 5 steps	5	
BQ4C			
9	Correct method	1	
10	Correct curve	1	
11	Neatness	1	

PART B

(5 marks)

Given: A diagonal scale of 50 mm equals to 1 m which reads up to 3 m.



Required: Write the 5 steps that are required to construct the above diagonal scale.

Step 1: _____

Step 2: _____

Step 3: _____

Step 4: _____

Step 5: _____

PART C

(3 marks)

Given: A triangle **ABC**.

Required: Construct the involute of triangle **ABC** which unwinds in a clockwise direction.

