

MINISTRY OF EDUCATION, HERITAGE & ARTS

WORKSHEET 2 YEAR 13 2021

TECHNICAL DRAWING

STRAND 1: GEOMETRY

INSTRUCTIONS:

1. Use your exercise book to do all the questions given below.
2. All measurements are in millimeters.
3. Show all construction lines clearly

NAME:

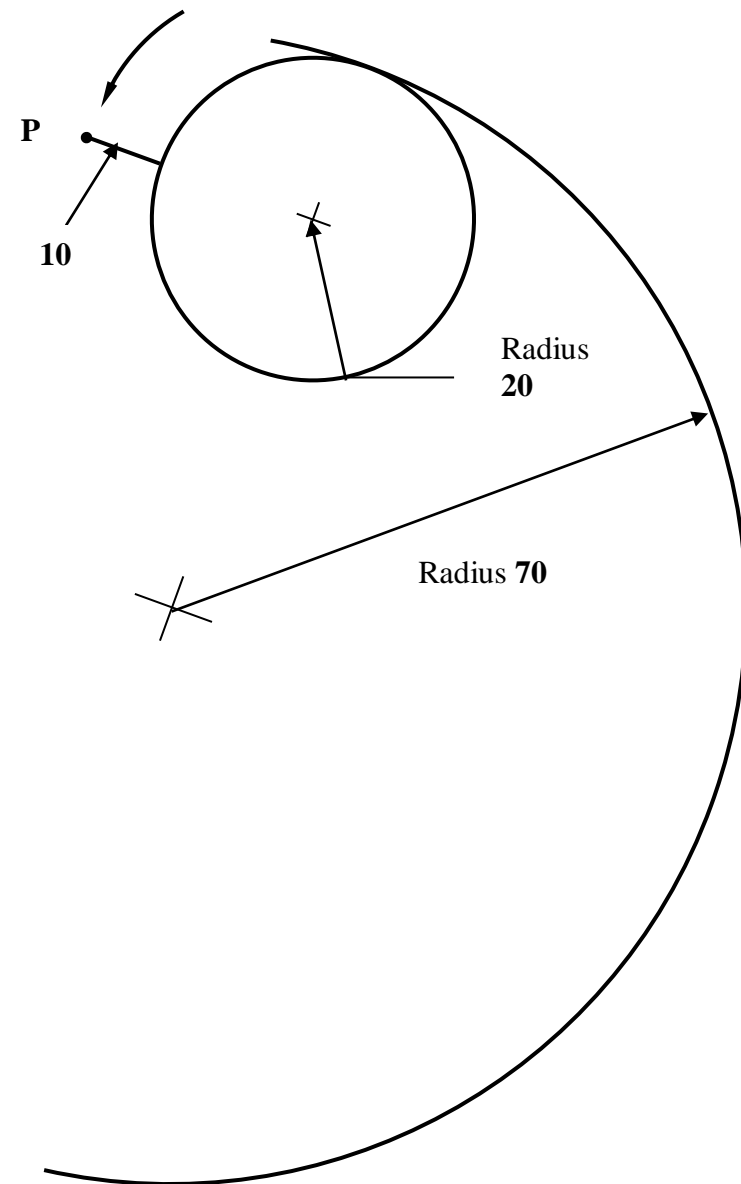
SECTION B

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: _____



(20 marks)

(9 marks)

(8 marks)

(1 mark)

BQ1A			
1	Correct division of circle	1	
2	Correct divisions on rolling circle and labels shown	2	
3	Correct generating lines or method	2	
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	
BQ1B			
8	Correct major axis	4	
8	Correct minor axis	4	
BQ4C			
9	Correct method	1	
10	Correct curve	1	
11	Neatness	1	

PART A

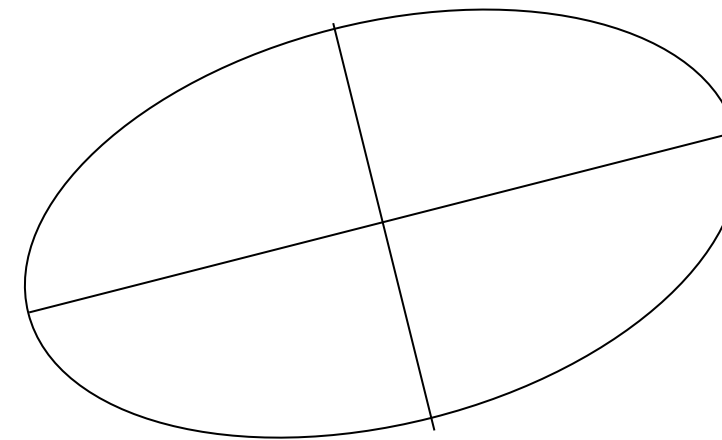
(8 marks)

Given: The ellipse.

Required: Find the major and minor axis.

(8 marks)

Major Axis = 110
Minor Axis = 50



PART C

(3 marks)

Given: A Pentagon **ABCDE**.

Required: Construct the involute of Pentagon **ABCDE** which unwinds in a clockwise direction.

