TECHNICAL DRAWING – YEAR 12 WORKSHEETS
2021

WEEK 2

TOPIC: PLANE GEOMETRY **DATE**: 31/05/21 To 04/06/21

MONDAY (31/05) PLANE GEOMETRY

1. DEFINE

SPIRAL : _____

_____

2. List two career paths for Technical Drawing

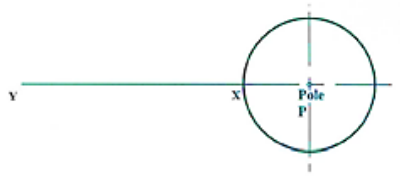
_____

_____

3. Sketch a CONICAL SPIRAL

TUESDAY (01/06) SPIRALS

Given pole P Limiting vectors X and Y. Draw the ARCHIMEDIAN SPIRAL(Sense : clockwise)



WEDNESDAY (02/06) INVOLUTE

Draw the involute of the given Triangle (clockwise)

THURSDAY (03/06) SCALES

Given for the Diagonal Reduction Scale of 1:50 to read Metres and Tenths of a Metre up to 3 metres

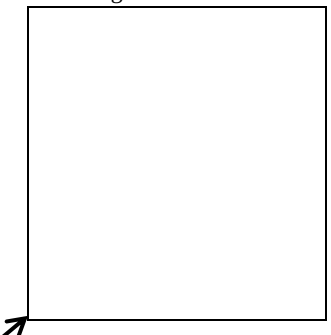
Do all the necessary calculations (note do not draw the scale)

SCALE LENGTH
SCALE INTERVAL
NO OF PARTS

FRIDAY(04/06) HELIX

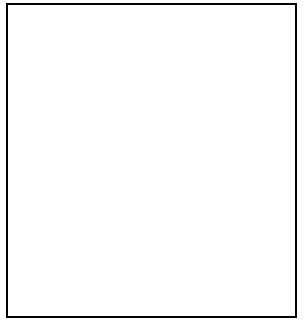
1. Define common terms related to helix
   - Pitch _____
   - Revolutions _____
   - πD _____
2. Construct a Right and Left hand helical curve for one revolution **(single line helix)**

Right Hand Helix



Start Point

Left Hand Helix



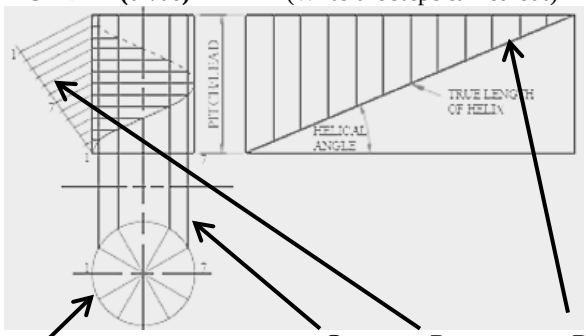
Start Point

(NOTE: REFERENCE: Refer to TD lesson notes and TD workbook)

TECHNICAL DRAWING – YEAR 12
2021

WEEK 3
TOPIC: PLANE GEOMETRY **DATE**: 07/06/21 To 11/06/21

MONDAY (07/06) HELIX (Write the steps carried out)



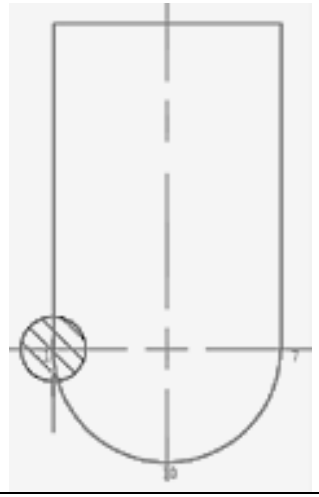
A _____

B _____

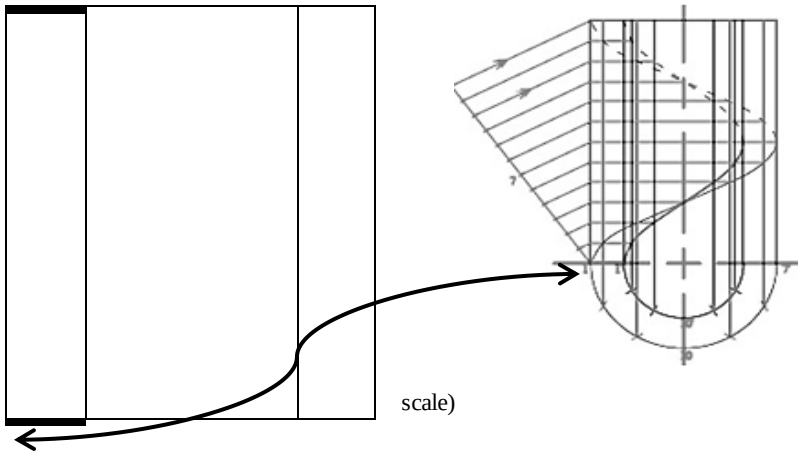
C _____

D _____

TUESDAY (08/06) CIRCULAR SPRING
Draw the right hand circular helical spring (3/4 revolutions)



WEDNESDAY (09/06) FLAT PLATE
Draw external tangent to two unequal circles given below (Given answer is not to scale)



THURSDAY (10/06) CONIC SECTION

1. Name five types of Conic sections.

   _____

   _____

2. Find the value for DV if DF is 20mm for a Parabola.

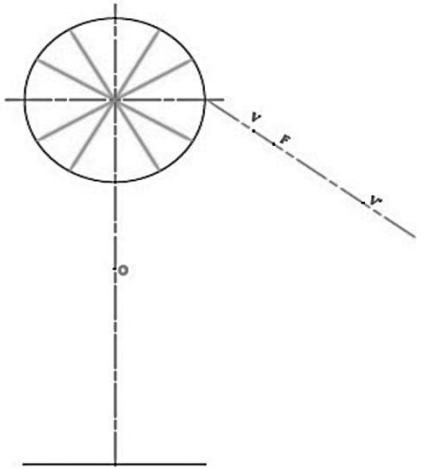
   _____

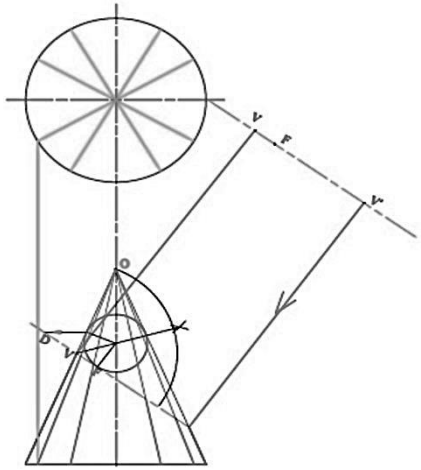
3. Find FV of a parabola with a ratio of eccentricity of 6:4 and DV is 8mm.

   _____

   _____

FRIDAY (11/06) CONIC SECTION (Find DVF and complete the elevation of the cone) Note: Complete the conic
The diagram on the right shows Part working to help you out)





(NOTE: REFERENCE: Refer to TD lesson notes and TD workbook)