**SHORT ANSWER PROBLEMS**

1) Identify the line types in the drawing below

![Line Types Diagram]

2) What type of view is shown below, left?

![View Diagram]
3) List the types of views shown in the drawing below

4) What type of surface is shown (at the arrow)?
   a. Normal
   b. Inclined
   c. Oblique
   d. None of the above

5) True or false? An inclined surface can appear as an edge in a principal plane of projection. ________

6) Identify the following dimensioning symbols:
7) What does the following note mean?

8) A grooved block is shown below left. Three sliders are shown below right and are made to fit in the rectangular groove.
   a. What is the maximum clearance for part A?
   b. What type of fit would part B provide?
   c. What is the tolerance for part C?
**SKETCHING & DIMENSIONING PROBLEMS**

(Note: individual problems could have a mix of assessment topics, e.g., both dimensioning and isometric drawing in the first *Isometric Drawing* section problem below)

**THIRD ANGLE PROJECTION**

Sketch the third angle projections given the isometric drawings and assuming each grid mark is $\frac{3}{4}$ inch (one grid mark on your regular grid paper).

1) ![Isometric Drawing](image1.png)
2) ![Isometric Drawing](image2.png)

Sketch the missing FRONT view given the TOP and RIGHT views are complete.

3) ![Front View](image3.png)
4) ![Front View](image4.png)
Fill in the missing lines:

5) 

6)
**ISOMETRIC DRAWING**

1) A complete third angle projection of an object is shown below. Assuming that each grid space in both the third angle projection and isometric drawing grid is 5 mm,
   a. Dimension the following complete third angle projection
   b. Construct the corresponding isometric drawing

2) Complete the isometric drawings corresponding to the complete third angle projections below (grid spaces are 5 mm). Also draw the isometric axes in problem 2 (given the “O”s for orientation):

3)
**DIMENSIONING**

1) Dimension the following. Assume each square is 1.00 inch.