Section # _____ Last, First name: _____

* You need to fill out #8 and #9 and turn it in by the beginning of the next class meeting.

1. Turn on CMM.

2. Open PC-Dmis software.

3. Open a new file (New measurement routine).

- Set unit: inch or mm
- Interface: Machine 1 (to use CMM) or Offline (PC-Dmis practice)

4. Select a Probe (Sensor) type.

5. Set up specimen views, if you have a part drawing in igs file format.

6. Datum Specifications

- For Datum_A (Top surface of the specimen): Measure 3-4 points (4 points recommended).
  - Change datum name into Datum_A.
- For Datum_B (Front surface): Measure 2-4 points (4 points recommended).
  - Change datum name into Datum_B
- For Datum_C (Left surface): Measure 1-4 points (4 points recommended).
  - Change Datum name into Datum_C.

7. Alignment (Creation of a coordinate frame.)

- Datum_A: Z-plus level (By doing this, your z-axis becomes perpendicular to Datum_A)
- Datum_B: Rotate to Y-negative (The Y will be – Datum_B direction.).

  Rotate about Z-plus (The orientation of the Y-axis is fixed about the Z-axis.)

- Datum_A as Z-origin. Datum_B as Y-origin. Datum_C as X-origin.

8. Measure a Circular hole dimension (Diameter and location). Multiple circular holes were measured.

Dimensions	Circle #1	Circle #2	Curve (Rounded corner)
X			
Y			
Diameter			

9. Measure the Angle (of the inclined surface with respect to the rear datum surface).

Angle = _____