

# H.W.

❖ **Submit a pdf file via email by next Monday 6 p.m.**

1. An object shown in figure is described by six points w.r.t a body-fixed frame A. When the object is rotated  $90^\circ$  about the z axis and then  $90^\circ$  about the y axis, followed by a translation of 4 in the x direction,
  - 1) What is a homogeneous transformation matrix?
  - 2) What are the transformed six points?
  - 3) Draw the transformed object with six points as well as the body-fixed frame A.

