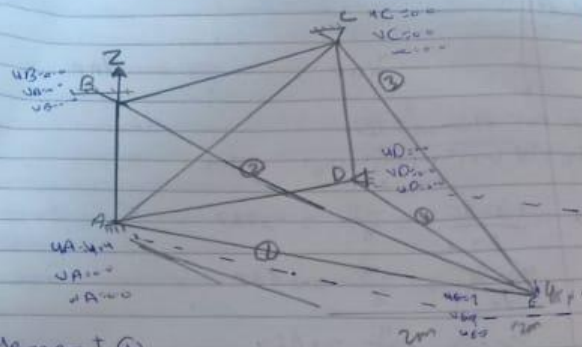


and in class  
5/21/21

Determine the force in each member of the truss.



For Element ①

$$L_1 = \sqrt{(-2)^2 + (-4)^2 + 6^2} = 4.47 \text{ m}$$

$$C_x = \frac{x_A - x_E}{L_1} = \frac{-2}{4.47} = -0.447$$

$$C_y = \frac{y_A - y_E}{L_1} = \frac{-4}{4.47} = -0.89$$

$$C_z = \frac{z_A - z_E}{L_1} = \frac{0}{4.47} = 0$$

assume  $\frac{EA}{L} \rightarrow \text{const}$

①