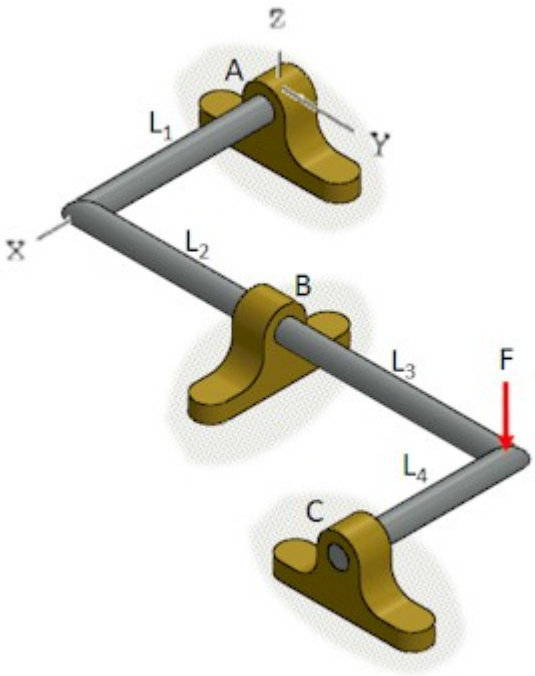
Online Homework System

Assignment Worksheet
*6/16/22 - 4:04:31 PM MDT*

**Name:** _____ **Class:**
**Class #:** _____ **Section #:** _____
**Instructor:** Parker Schnepf **Assignment:** 6.3 Homework Exercises

**Question 1: (10 points)**




Pipe **ABC** is supported by three smooth journal bearings. Find the reactions at **A**, **B**, and **C**, given:
**F** = 175 *lb*, $\mathbf{L_1}$ = 1.2 *ft*, $\mathbf{L_2}$ = 1.4 *ft*, $\mathbf{L_3}$ = 0.8 *ft*, $\mathbf{L_4}$ = 1 *ft*
*(ans: $\boldsymbol{A_Y}$ = 0 lbs, $\boldsymbol{A_Z}$ = -318 lbs, $\boldsymbol{B_X}$ = 0 lbs, $\boldsymbol{B_Z}$ = 875 lbs, $\boldsymbol{C_Y}$= 0 lbs, $\boldsymbol{C_Z}$ = -382 lbs)*

Select problem completion status from drop-down list:

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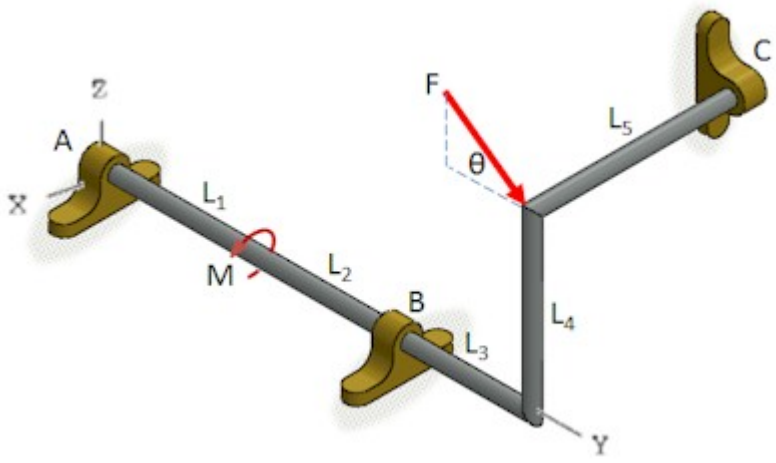
**Question 2: (10 points)**




Pipe **ABC** is supported by three smooth journal bearings. Find the reactions at **A**, **B**, and **C**, given:
**F** = 440 *lbs*, **M** = 160 *lb·ft*, **θ** = 45°, $\mathbf{L_1}$ = 0.6 *ft*, $\mathbf{L_2}$ = 0.8 *ft*, $\mathbf{L_3}$ = 1 *ft*, $\mathbf{L_4}$ = 1 *ft*, $\mathbf{L_5}$ = 1 *ft*
*(ans: $\boldsymbol{A_X}$ = -222 lbs, $\boldsymbol{A_Z}$ = -337 lbs, $\boldsymbol{B_X}$ = 222 lbs, $\boldsymbol{B_Z}$ = 808 lbs, $\boldsymbol{C_Y}$ = -311 lbs, $\boldsymbol{C_Z}$ = -160 lbs)*

Select problem completion status from drop-down list:

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