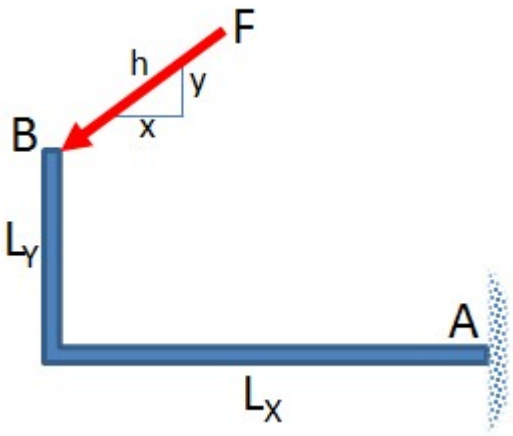
Online Homework System

Assignment Worksheet
6/16/22 - 4:00:35 PM MDT

Name: _____ **Class:**
Class #: _____ **Section #:** _____
Instructor: Parker Schnepf **Assignment:** 4.1 Homework Exercises

Question 1: (10 points)



Find the moment of the force about point **A**. Neglect the thickness of the beam. Given forces and dimensions are:
F = 175 *lbs*, $\mathbf{L_X}$ = 7 *ft*, $\mathbf{L_y}$ = 3 *ft*, **x**,**y**,**h** = 12,5,13, respectively.
(ans: $\boldsymbol{M_A}$ = 956 lb·ft)

Select problem completion status from drop-down list:

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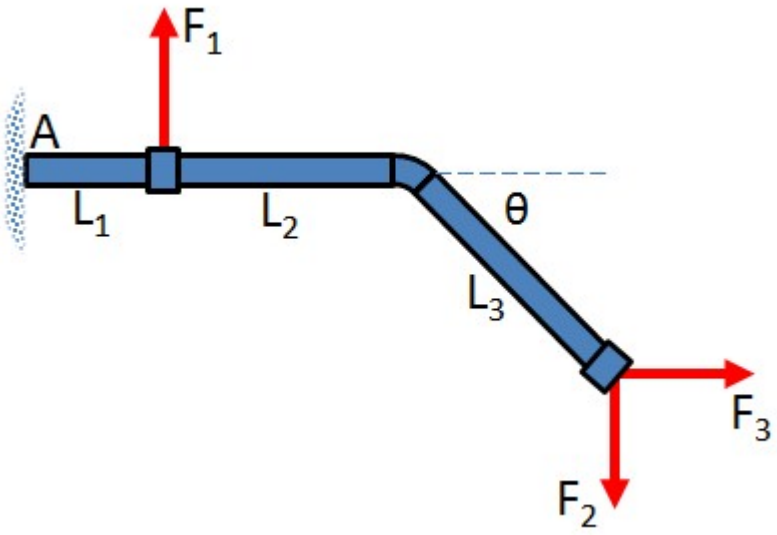
Question 2: (10 points)



A bent pipe is anchored at point **A** and supports 3 forces: $\mathbf{F_1}$, $\mathbf{F_2}$, and$\mathbf{F_3}$. Neglecting the thickness of the pipe, find the resultant moment produced by the forces about point **A**, given:

$\mathbf{F_1}$ = 500 *lbs*, $\mathbf{F_2}$ = 125 *lbs*, $\mathbf{F_3}$ = 275 *lbs*, $\mathbf{L_1}$ = 2 *ft*, $\mathbf{L_2}$ = 2 *ft*, $\mathbf{L_3}$= 4 *ft*, $\boldsymbol{\theta}$ = 35°

(ans: $\boldsymbol{M_A}$ = 721 lb·ft)

Select problem completion status from drop-down list:

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