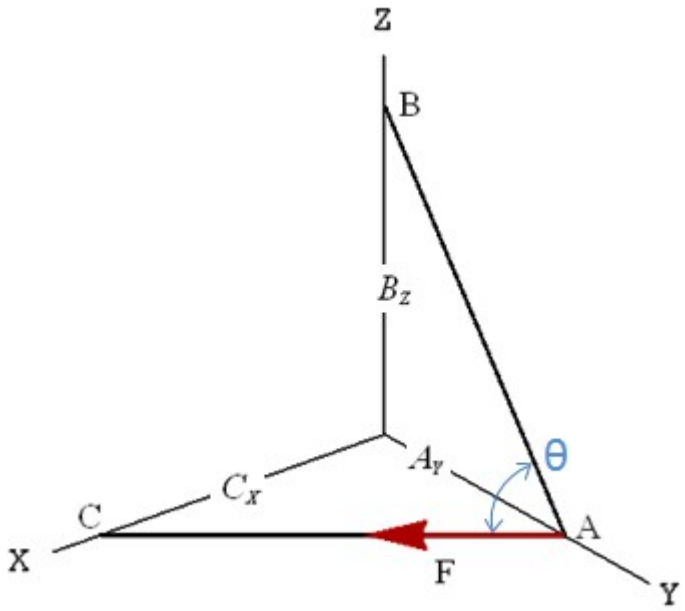
Online Homework System

Assignment Worksheet
6/25/22 - 10:13:29 PM MDT

Name: _____ **Class:**
Class #: _____ **Section #:** _____
Instructor: Parker Schnepf **Assignment:** 2.3 Homework Exercises

Question 1: (10 points)



Find the angle **θ**, between force **F** and line **AB**, given:
F = 250 *N*, $\mathbf{A_y}$ = 7 *m*, $\mathbf{B_z}$ = 12 *m*, $\mathbf{C_x}$ = 15 *m*
*(ans: **θ** = 77.7°)*

Select problem completion status from drop-down list:

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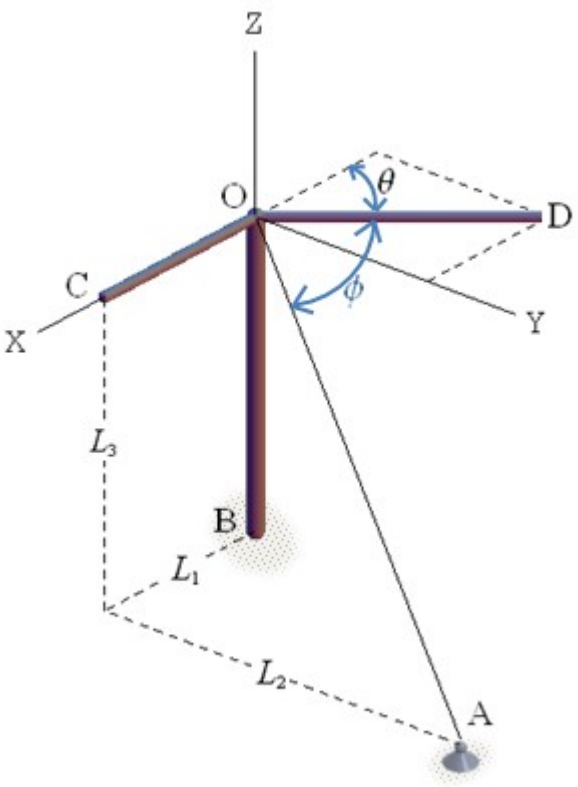
Question 2: (10 points)



Cable **OA** is used to support column **OB** and the attached pipes, **OC**and **OD**. Determine the angle **Φ** that pipe **OD** makes with cable **OA**, given:

$\mathbf{L_1}$ = 12 *ft*, $\mathbf{L_2}$ = 12 *ft*, $\mathbf{L_3}$ = 20 *ft*, **θ** = 50°

*(ans: **Φ** = 86.8°)*

Select problem completion status from drop-down list:

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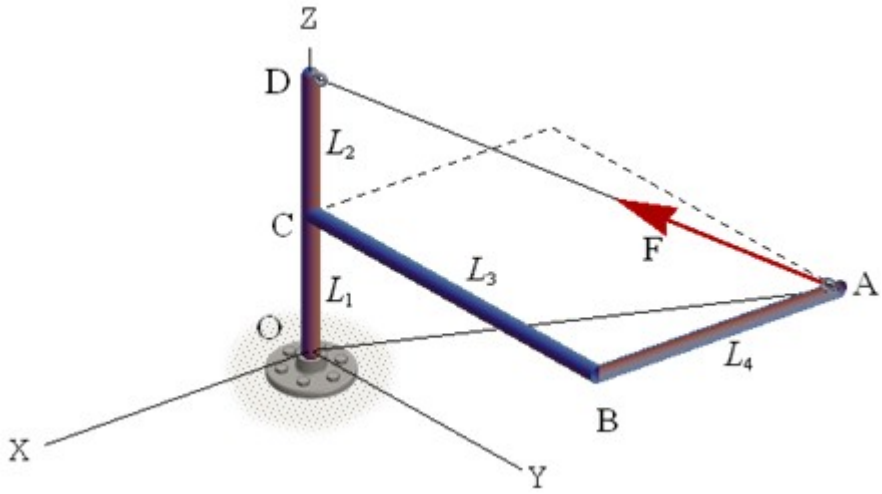
Question 3: (10 points)



Find the magnitude and components of force **F** acting along line **AO**, given:
F = 125 *N*, $\mathbf{L_1}$ = 1 *m*, $\mathbf{L_2}$ = 2 *m*, $\mathbf{L_3}$ = 4 *m*, $\mathbf{L_4}$ = 2 *m*
(ans: $\boldsymbol{F_{AO}}$ *= 100 N,* $\bar{\boldsymbol{F}}_{\boldsymbol{AO}}$ *= <43.7, -87.5, -21.9> N)*

Select problem completion status from drop-down list:

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