

Name: _____

Class #: _____

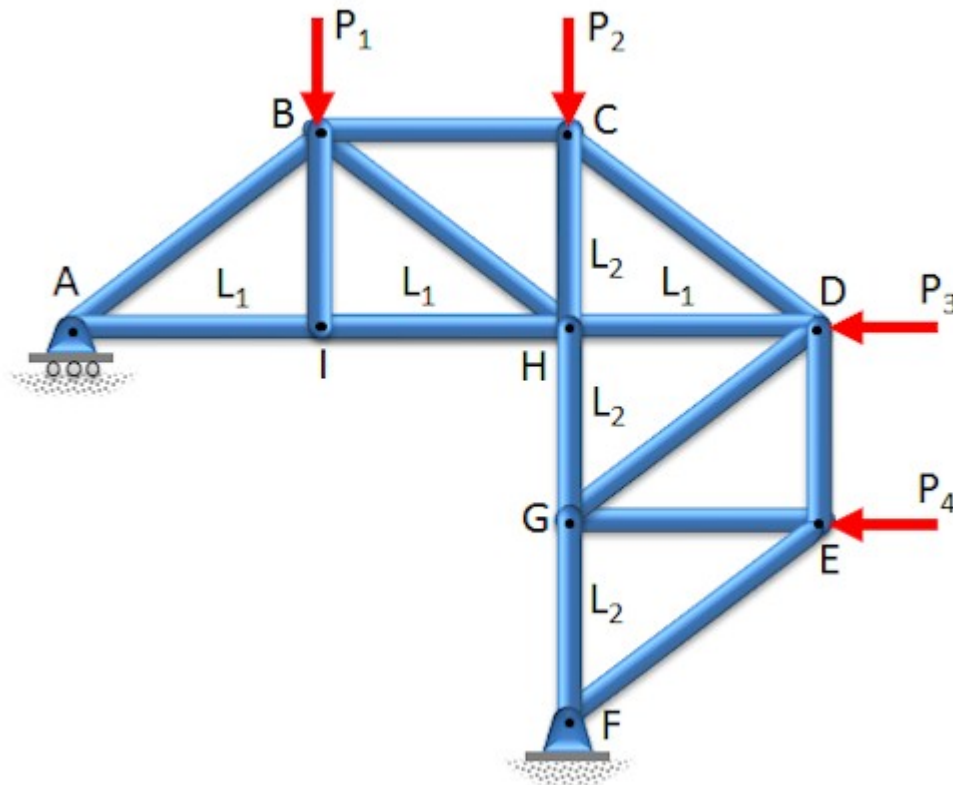
Instructor: Parker Schnepf

Class: _____

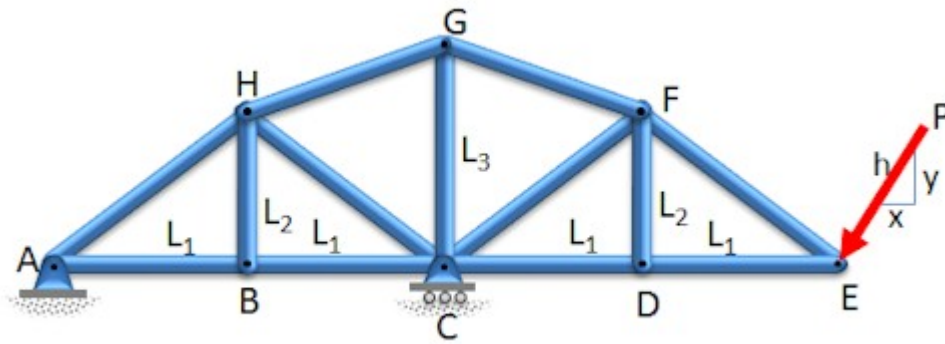
Section #: _____

Assignment: 7.2 Homework Exercises

Question 1: (10 points)

Find the force in member **CD**, **DH**, and **GH** of the truss and state if the members are in Tension or Compression, given: $P_1 = 100 \text{ lbs}$, $P_2 = 150 \text{ lbs}$, $P_3 = 125 \text{ lbs}$, $P_4 = 200 \text{ lbs}$, $L_1 = 4 \text{ ft}$, $L_2 = 3 \text{ ft}$ (ans: **CD** = 563 lbs C, **DH** = 450 lbs T, **GH** = 306 lbs T)

Select problem completion status from drop-down list:

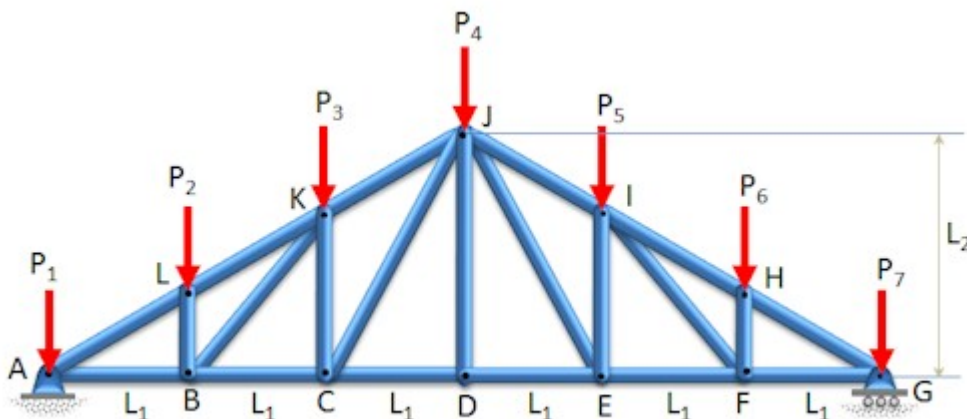
Question 2: (10 points)

Find the force in member **BC**, **CH**, and **GH** of the truss and state if the members are in Tension or Compression, given:

$P = 550 \text{ kN}$, $L_1 = 5 \text{ m}$, $L_2 = 4 \text{ m}$, $L_3 = 6 \text{ m}$, $x, y, h = 3, 4, 5$, respectively

(ans: **BC** = 880 kN C, **CH** = 235 kN C, **GH** = 790 kN T)

Select problem completion status from drop-down list:

Question 3: (10 points)

Find the force in members **DE**, **EJ**, and **IJ** of the truss and state if the members are in Tension or Compression, given:

$P_1 = 170 \text{ lbs}$, $P_2 = 190 \text{ lbs}$, $P_3 = 165 \text{ lbs}$, $P_4 = 155 \text{ lbs}$, $P_5 = 170 \text{ lbs}$, $P_6 = 155 \text{ lbs}$, $P_7 = 155 \text{ lbs}$, $L_1 = 3 \text{ ft}$, $L_2 = 5 \text{ ft}$

(ans: **F_{DE}** = 444. lbs T, **F_{EJ}** = 289 lbs T, **F_{IJ}** = 678 lbs C)

Select problem completion status from drop-down list:
