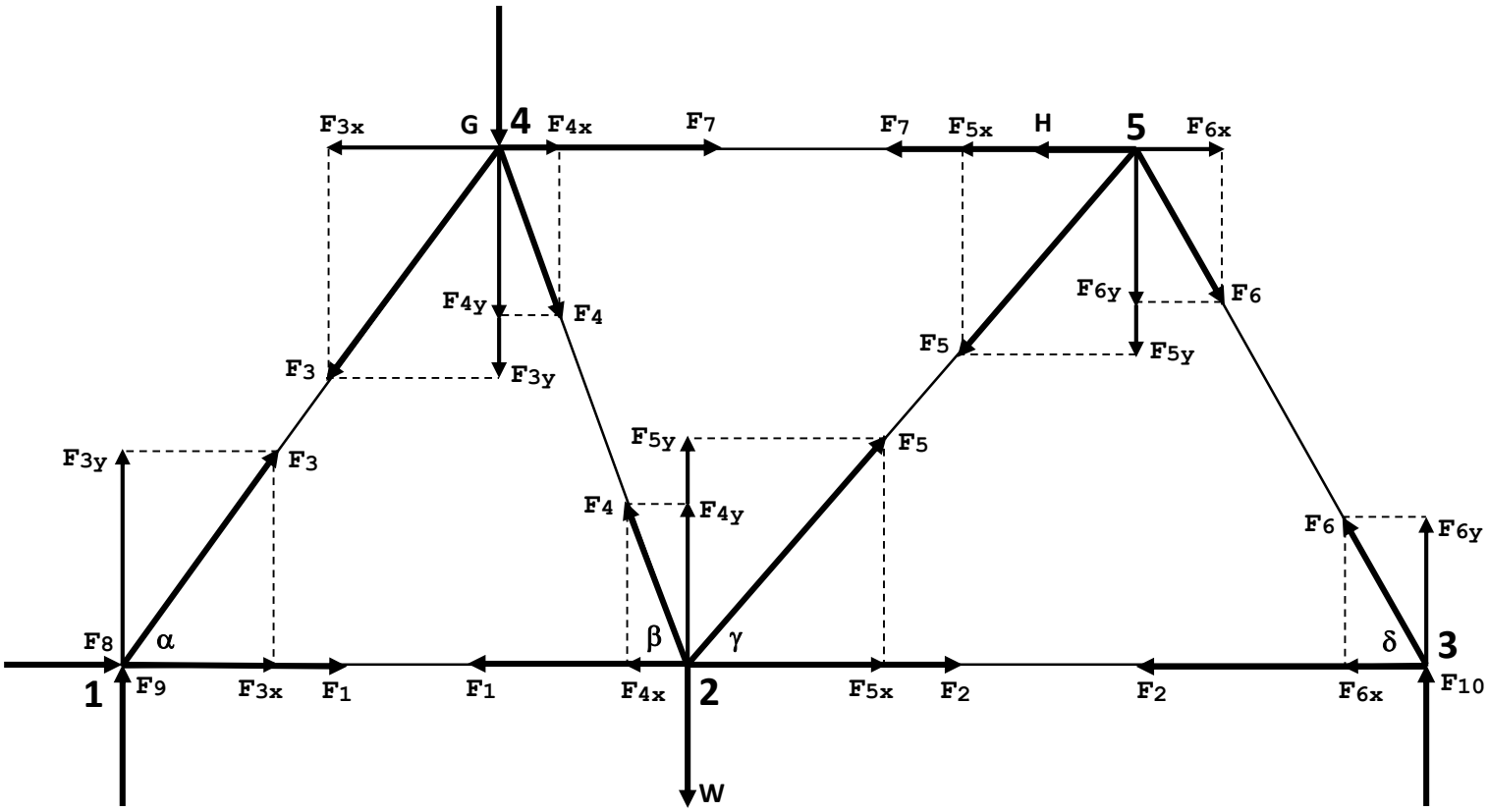
CSC 2262, Fall 2021, Lab 11b



In the truss shown above, α=44°, β=69°, γ=48°, δ=76°, W=330, G=410, H=260.

The equations for the unknown forces F_1 – F_{10} are:

$$
\begin{aligned}
F_1 + F_{3x} + F_8 &= 0 \\
F_{3y} + F_9 &= 0 \\
-F_1 + F_2 - F_{4x} + F_{5x} &= 0 \\
F_{4y} + F_{5y} &= W \\
-F_2 - F_{6x} &= 0 \\
F_{6y} + F_{10} &= 0 \\
-F_{3x} + F_{4x} + F_7 &= 0 \\
-F_{3y} - F_{4y} &= G \\
-F_{5x} + F_{6x} - F_7 &= H \\
-F_{5y} - F_{6y} &= 0
\end{aligned}
$$

Write a MATLAB program to calculate and print the unknown forces F_1 – F_{10} .

The output of this program should look like this:

```
forces =
  251.1640
   61.4281
 -710.6016
   89.5749
  331.5298
 -253.9171
 -543.2648
  260.0000
  493.6254
  246.3746
```