Equilibrant

Problem

- Find the equilibrant for the following:
  - F_1 = 75 N at 20° north of east
  - F_2 = 124 N at 20° west of north
  - F_3 = 12 N at 20° east of north
  - F_4 = 164 N at 85° south of east

F_1 = 75 N at 20° north of east

F_2 = 124 N at 20° west of north

F_3 = 12 N at 20° east of north

F_4 = 164 N at 85° south of east

X_1 = 70.48 N (E)
X_2 = -42.41 N (W)
X_3 = 4.10 N (E)
X_4 = 14.26 N (E)
X_{total} = 46.46 N (E)

Y_1 = 25.35 N (N)
Y_2 = 116.52 N (N)
Y_3 = 11.28 N (N)
Y_4 = -163.38 N (S)
Y_{total} = -9.93 N (S)