

Ch 6 Homework Solutions: Facility Location

Problem 6-1

$$d_{1x} = 300 \quad d_{1y} = 320 \quad V_1 = 4,000$$

$$d_{2x} = 375 \quad d_{2y} = 470 \quad V_2 = 6,000$$

$$d_{3x} = 470 \quad d_{3y} = 180 \quad V_3 = 3,000$$

$$C_x = \frac{\sum d_{ix} V_i}{\sum V_i} = \frac{(300)(4,000) + (375)(6,000) + (470)(3,000)}{4,000 + 6,000 + 3,000} = 374$$

$$C_y = \frac{\sum d_{iy} V_i}{\sum V_i} = \frac{(320)(4,000) + (470)(6,000) + (180)(3,000)}{4,000 + 6,000 + 3,000} = 357$$