$$AC^2 = 50^2 + 40^2 - 2 \times 50 \times 40 \times \cos 60$$

$$AC^2 = 2100$$

$$\sqrt{ans}$$

$$AC = 45.83m$$

Area of triangle ACD = $\dfrac{1}{2} \times 40 \times 50 \times \sin 60 = 866.03m^2$

Half area of triangle ACD = one section $\dfrac{1}{2} \times 866.03 = 433.01m^2$ ①

$$\dfrac{\sin A1}{50} = \dfrac{\sin 60}{45.83} \quad \text{(x50)} \qquad \sin A1 = 0.94 \ (\sin^{-1}) \qquad A1 = 70.88°$$

C1 = 180 – 70.88 – 60 = 49.12° (angle sum in triangle is 180)

$$\cos B = \dfrac{55^2 + 36^2 - 45.83^2}{2 \times 55 \times 36} \qquad \cos B = 0.56 \ (\cos^{-1}) \qquad B = 55.89$$

Area of triangle BCA = $\dfrac{1}{2} \times 55 \times 36 \times \sin 55.89 = 819.68m^2$

Half area of triangle BCA = one section $\dfrac{1}{2} \times 819.68 = 409.84m^2$ ①

Therefore all sections are at least 400m².
In triangle ACD the sections are 433.01m² each.
In triangle BCA the sections are 409.84m²each.