



$$P_1 = x + y + z$$

$$P_2 = (25 + y) + (25 - x) + 14 + z$$

$$P_1 = P_2 \Rightarrow x + y + z = 25 - x + 25 + y + 14 + z$$

$$x + y + z = 32 \quad (1)$$

$$A_1 = \frac{1}{2} xy \sin 32.52 = \frac{1}{2} A$$

$$= \frac{1}{2} (25^2 \sin 32.52)$$

$$\Rightarrow xy = \frac{625}{2} = 312.5 \quad (2)$$

$$(1) \text{ into } (2) \quad x(32 - x) = 312.5$$

$$x^2 - 32x + 312.5 = 0$$

No solution so no.