

$$3 \text{ (ii)} \quad \text{sum of 2 given angles} = 63 + 27 \\ = 90'$$

$\therefore$  angles are complementary.

$$\text{(iii)} \quad \text{sum of 2 given angles} = 112 + 68 \\ = 180'$$

$\therefore$  angles are supplementary

$$\text{(iv)} \quad 130 + 50 \\ = 180'$$

supplementary

$$\text{(v)} \quad 45' + 45' \\ = 90'$$

complementary

$$\text{(vi)} \quad 80 + 10 \\ = 90'$$

complementary

$$\text{(4)} \quad \text{let angle} = x' \\ \text{its complement} = x'$$

$$x + x = 90'$$

$$\Rightarrow 2x = 90$$

$$\Rightarrow x = \frac{90}{2} \\ = 45'$$

$\therefore$  required angle =  $45'$