



Exercise 4A

Question 8:

Let the required angle be x°

Then its supplement is $180^\circ - x^\circ$

$$\Rightarrow x^\circ = (180^\circ - x^\circ) - 25^\circ$$

$$\Rightarrow x^\circ + x^\circ = 180^\circ - 25^\circ$$

$$\Rightarrow 2x = 155$$

$$\Rightarrow x = \frac{155}{2} = 77\frac{1}{2}$$

\therefore The measure of an angle which is 25° less than its supplement is

$$77\frac{1}{2} = 77.5^\circ.$$

Question 9:

Let the required angle be x°

Then, its complement = $90^\circ - x^\circ$

$$\Rightarrow x^\circ = 4(90^\circ - x^\circ)$$

$$\Rightarrow x^\circ = 360^\circ - 4x^\circ$$

$$\Rightarrow 5x = 360$$

$$\Rightarrow x = \frac{360}{5} = 72$$

\therefore The required angle is 72° .

Question 10:

Let the required angle be x°

Then, its supplement is $180^\circ - x^\circ$

$$\Rightarrow x^\circ = 5(180^\circ - x^\circ)$$

$$\Rightarrow x^\circ = 900^\circ - 5x^\circ$$

$$\Rightarrow x + 5x = 900$$

$$\Rightarrow 6x = 900$$

$$\Rightarrow x = \frac{900}{6} = 150.$$

\therefore The required angle is 150° .

***** END *****

