REFLECTION OF LIGHT

1. How many images will be formed if the mirror is arranged at 30°?

Ans:-

$$n = \frac{360^\circ}{\theta} - 1$$

$$= \frac{\cancel{360^{12}}}{\cancel{30^\circ}} - 1 = 12 - 1 = \underline{11}$$

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2. What should be the angle of the mirrors for the formation of five images?

Ans:-

$$5 = \frac{360^\circ}{\theta} - 1$$

$$5 + 1 = \frac{360^\circ}{\theta}$$

$$6 = \frac{360}{\theta}$$

$$\theta = \frac{360}{6} = \underline{60^\circ}$$

$$5 = \frac{360}{60} - 1$$

$$= 6 - 1 = \underline{5}.$$
