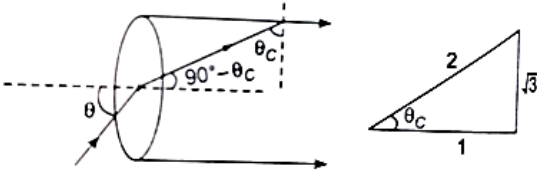


PHYSICS

31. (2)
32. (3)
33. (4)
34. (2)
35. (1)
36. (2)

According to Snell's law



$$(1) \sin \theta = (\mu) \sin (90^\circ - \theta_c)$$

$$\sin \theta = \left(\frac{2}{\sqrt{3}}\right) \cos \theta_c = \left(\frac{2}{\sqrt{3}}\right) \left(\frac{1}{2}\right) = \frac{1}{\sqrt{3}}$$

37. (2)
38. (4)
39. (1)
40. (2)

Angle between two mirrors (θ) = 60° .

Number of images formed by the inclined

$$\text{mirror (n)} = \frac{360^\circ}{\theta} - 1 = \frac{360^\circ}{60^\circ} - 1 = 6 - 1 = 5$$

Note: When two plane mirrors are inclined to each other at an angle θ then number of

images (n) formed $n = \frac{360}{\theta}$ when object is

placed asymmetrically, and $n = \frac{360}{\theta} - 1$ when

object is placed symmetrically.



PARISHRAMA NEET ACADEMY