

Reflection of light –Numericals

1. An object is at a distance 25cm in front of a plane mirror. The mirror is shifted 5cm away from the object. Find: (i) the new distance between the object and the image (ii) the distance between the two positions of the image.
2. The incident ray and the reflected ray from a mirror are mutually perpendicular to each other .Find the angle of incidence.
3. A man standing in front of a plane mirror finds his image at a distance 6 metre from himself. What is the distance of man from the mirror?
4. An insect is sitting in front of a plane mirror at a distance 1m from it. (a) Where is the image of the insect formed?
(b) What is the distance between the insect and the image?
5. An object T is kept 60cm in front of a plane mirror M. If the mirror is now moved 25cm away from the object, how does the image shift from its previous position?
6. State the number of images of an object placed between two mirrors ,formed in each case when the two mirrors are inclined to each other at (i) 90° (ii) 60°
7. An object is placed between two plane mirrors inclined at an angle of 50° . Find the number of images formed.
8. An object is placed 2cm from a plane mirror. If the object is moved by 1 cm towards the mirror, what will be the distance between the object and its new image?
9. A man is standing 5m from a mirror. How far is he from his own image?

