

Reflection at plane surface

Date:	Name:	Roll No.:	
Subject: Physics	Standard: 9	2011-2014	Assignment

1. State laws of reflection.
2. A ray of light strikes a plane mirror, such that angle with the mirror is 20° . What is value of angle of reflection? What is the angle between the incident ray and reflected ray?
3. Calculate the number of images formed in two plane mirrors, when they are held at the angle of (i) 72° and (ii) 36° .
4. Draw a neat ray diagram for the formation of images in two plane mirrors, when mirrors are (i) at right angles to each other (ii) when mirrors are facing each other.
5. State four characteristics of image formed in a plane mirror.
6. A boy stands 4 m away from plane mirror. If the boy moves $\frac{1}{2}$ m towards mirror, what is now the distance between the boy and his image?
7. 50 cm tall object is placed in front of a plane mirror at 1 m away from plane mirror. Calculate the image distance, image height, and distance between object and image.
8. State three uses of a plane mirror.
9. Draw a neat diagram of reflecting periscope.
10. Define the following terms. (i) plane of incidence (ii) reflected ray (iii) angle of incidence (iv) normal
11. An object is placed between two plane mirrors inclined at an angle of 50° . Find the number of images formed.
12. The incident ray and reflected ray from a plane mirror are mutually perpendicular to each other. Find the angle of incidence.
13. Differentiate between real and virtual image.
14. What is meant by lateral inversion of an image in a plane mirror? Explain it with the help of a ray diagram.
15. With the help of diagrams, explain the difference between the regular reflection and irregular reflection.