

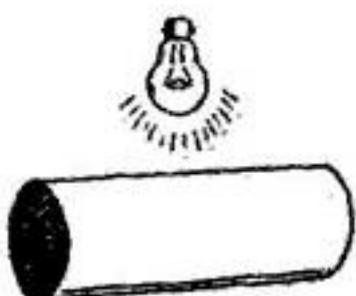
CBSE Class –VII Mathematics
NCERT Solutions
Chapter 15 Visualising Solid Shapes (Ex. 15.4)

Question 1. A bulb is kept burning just right above the following solids. Name the shape of the shadows obtained in each case. Attempt to give a rough sketch of the shadow.

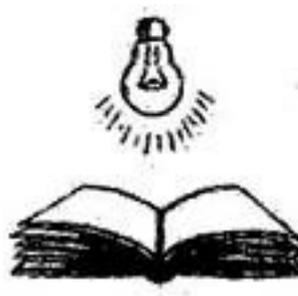
(You may try to experiment first and then answer these questions).



A ball
(i)



A cylindrical pipe
(ii)



A book
(iii)

Answer :

S.No.	Object	Shadow	Shape's name
(i)	A ball		Circle
(ii)	A cylindrical pipe		Line
(iii)	A book		Rectangle

Question 2. Here are the shadows of some 3-D objects, when seen under the lamp of the overhead projector. Identify the solid (s) that match each shadow.

(There may be multiple answers for these!)

A circle, A square, A triangle, A rectangle



(i)



(ii)

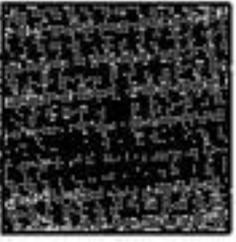


(iii)



(iv)

Answer :

S. No.	Shadow	Shape's Name	3-D objects
(i)		Circle	Chapatti, Football, Disc, Plate etc.
(ii)		Square	Die, Square paper sheet, cubical magic box, Chalk box etc.
(iii)		Triangle	Ice-cream cone, Birthday cap, etc.
(iv)		Rectangle	Geometry box, Book, Table etc.

Question 3. Examine if the following are true statements:

- (i) The cube can cast a shadow in the shape of a rectangle.
- (ii) The cube can cast a shadow in the shape of a hexagon.

Answers : (i) True (ii) False