KUTTIPPURAM Sub dist.

Silent BellS

ഫസ്റ്റ്ബെൽ - അനുബന്ധ പഠനസഹായകസാമഗ്രി

Class: 10	Subject:physics	Date: 10-12-2020	Worksheet No: 4.3	PLAY

Lesson & LO: REFLECTION OF LIGHT

1. The distances related to the mirrors are measured from the pole of the mirror then,
a) Which letter denotes the distance to the object?
b) Which is the letter used to represent the distance to the image?
c) What is focal length? Which is the letter used to represent it?
d) What is the relation between the radius of curvature and the focal length?

2.a) Write down the mirror equation.
b) From the above equation, write an equation for finding the distance to the object.
c) Write the equation for finding the distance to the image?

3. While representing image formation using ray diagrams,it is considered that a ray of light is incidenting from the left to the right ,then correct the wrong statements related to the new-cartesian sign convention given below

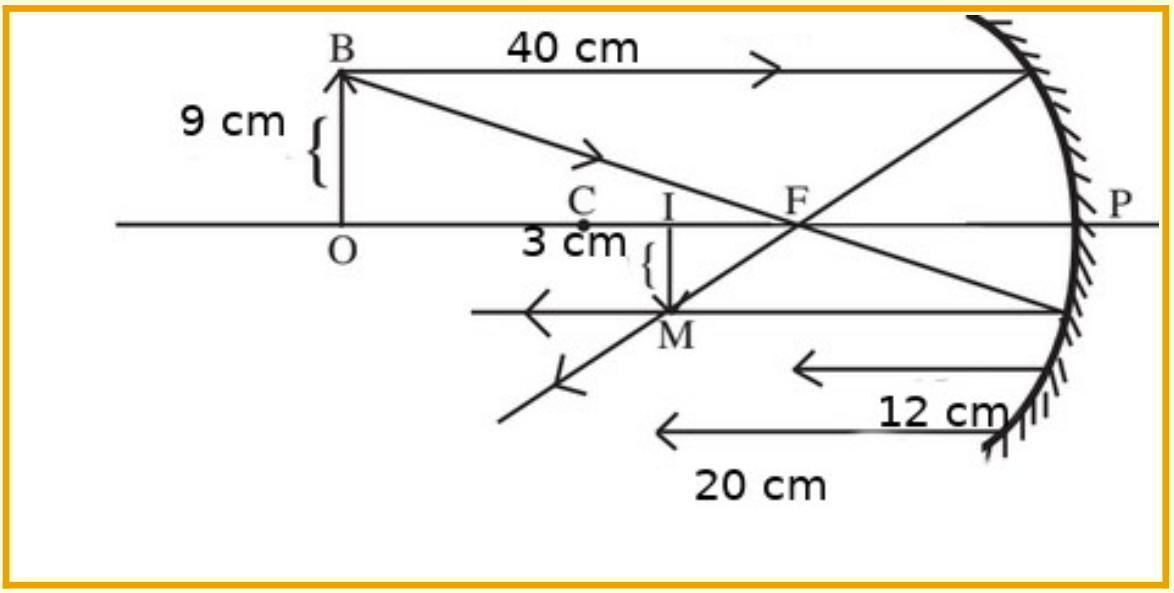
a) Pole is considered as the origin

b) All measurements are measured from the centre of curvature.

c) The distance to the right from the origin is taken as positive and to the left is taken as negative.

d) The distances measured downwards from the principal axis are positive and those upwards are negative.

4) Complete the table using the New Cartesian Sign Convention.



	Measurements	Measurements according to the new cartesian sign convention
Distance of object from the mirror (u) cm	.....cm	.....cm
Distance of image from the mirror (v) cm	.....cm	.....cm
Focal length (f) cm	.....cm	.....cm
Radius of curvature (r)	.....cm	.....cm
Height of object (ho)	.....cm	.....cm
Height of image (hi)	.....cm	.....cm

5. If the height of an image is expressed with a positive sign, what are the features of the image that you can understand from this?