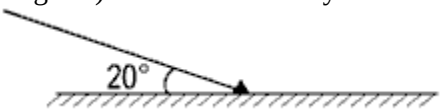
Name: _____ Practice Ph11 4-4

1. A clock with marks and no digits on its dial shows a time of 8:20 when viewed in a mirror. What is the actual time shown by the clock?

2. What is the perfect shape for a concave mirror that must reflect parallel rays of light to one point?
   a) Oval
   b) Parabola
   c) Right angle
   d) Cylinder
   e) Circle

3. A 5.0-cm real object is placed at a distance of 5.0 cm from a convex mirror of focal length 10.0 cm. Find the location and size of the image.

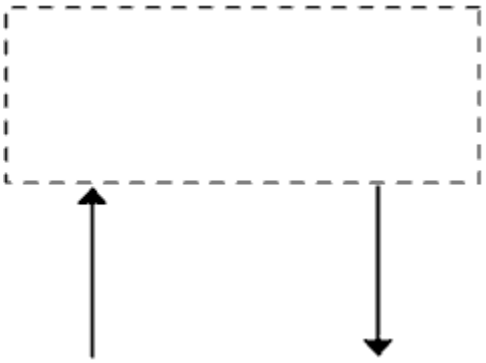
4. What is the angle of reflection (in degrees) for the incident ray shown below?



5. A real image is formed when
   a) rays farthest from the principle axis meet at the mirror's surface
   b) light rays converge and pass through the image
   c) light rays seem to diverge from behind the mirror
   d) the image cannot be projected onto the screen

6. T F The image of any object in a plane mirror is always located behind the mirror.

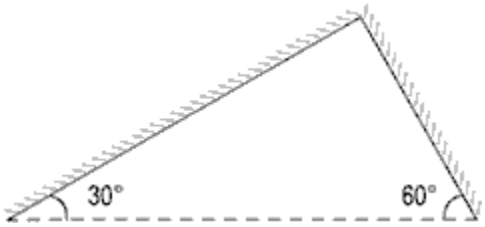
7.



The above figure shows the path of a ray of light falling on the mirror(s) represented by a box. Which of the following arrangements of mirrors will produce light rays in the path shown above?

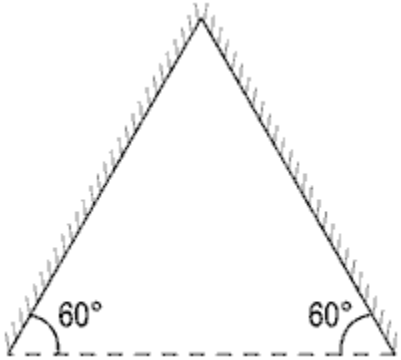
a)

b)



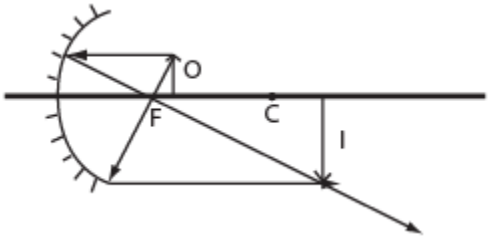
c)

d)

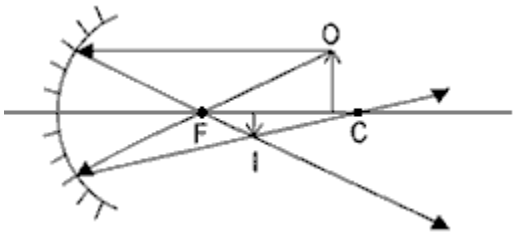


8. Which of the following ray diagrams is correct?

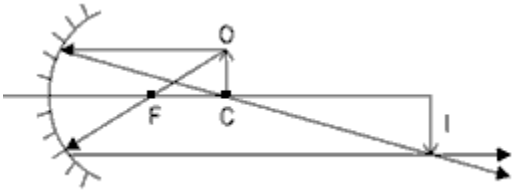
a)



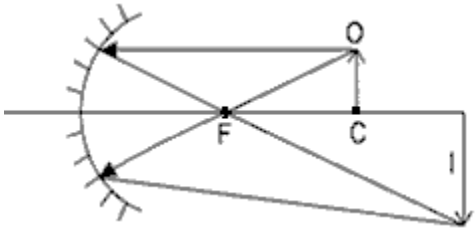
b)



c)



d)



9. What is the nature of an image formed by a concave mirror of focal length 10 cm for a real object placed 3 cm from the mirror?
   a) Real and upright
   b) Virtual and upright
   c) Virtual and inverted
   d) Real and inverted

10. If you stand 2 m in front of a plane mirror, where is your image located in relation to you?
   a) 1 m away
   b) 4 m away
   c) 2 m away
   d) 6 m away