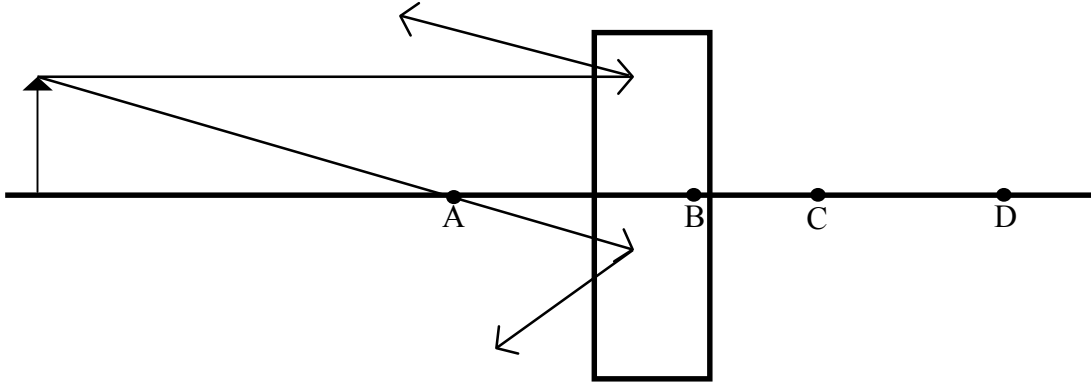
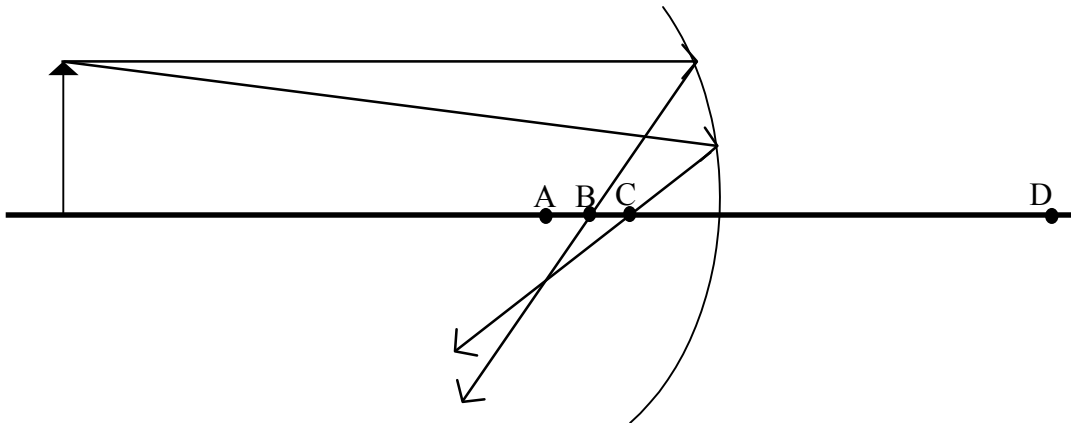


1. Light rays are coming into the mirror in the box. Two of these are drawn. Where is the image located?

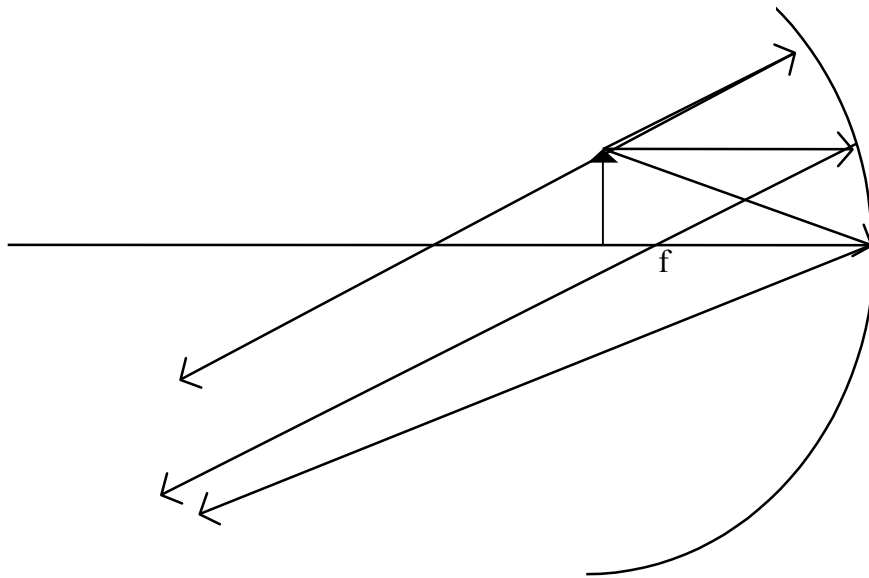


2. Light rays are coming into a mirror. Two of these are drawn. Where is the focal point of the mirror?

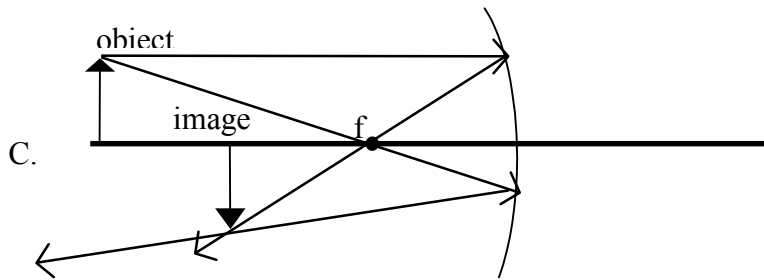
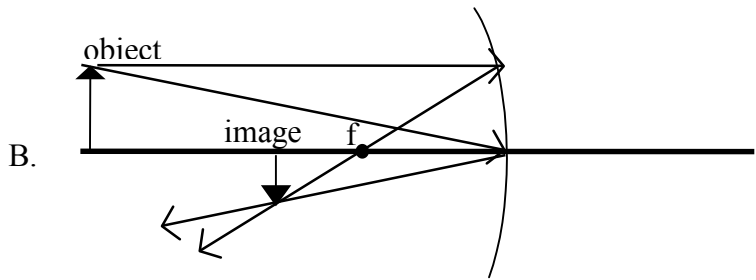
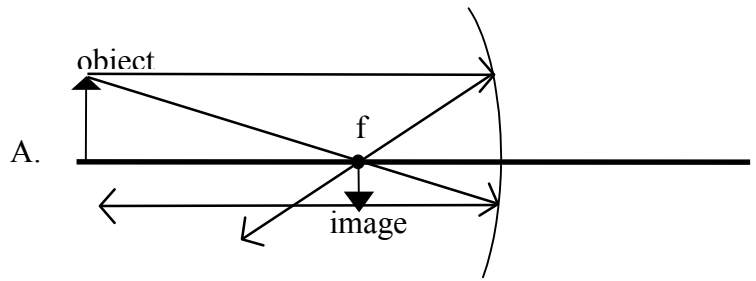


3. An object is placed slightly beyond the focal point f of the concave mirror. The ray diagram given below is drawn correctly. When a screen is placed so that the object is clearly focused on the screen, the screen will be located

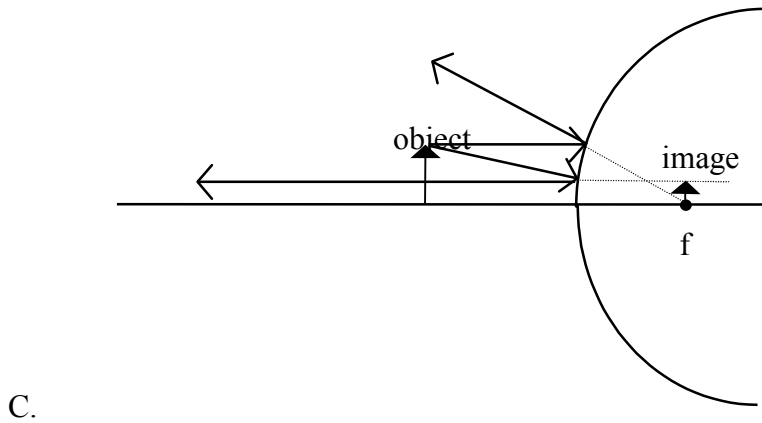
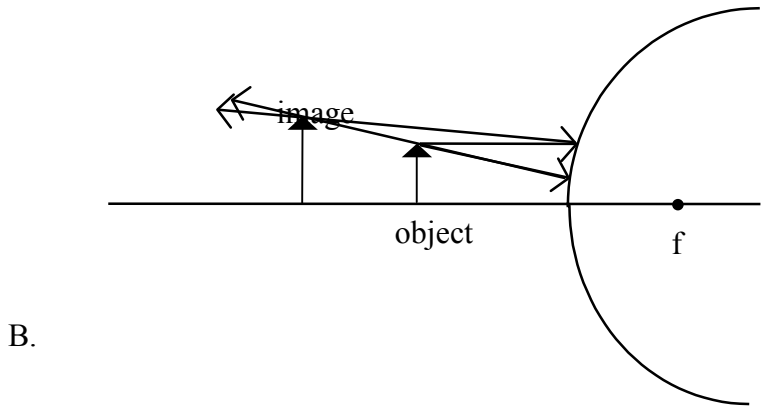
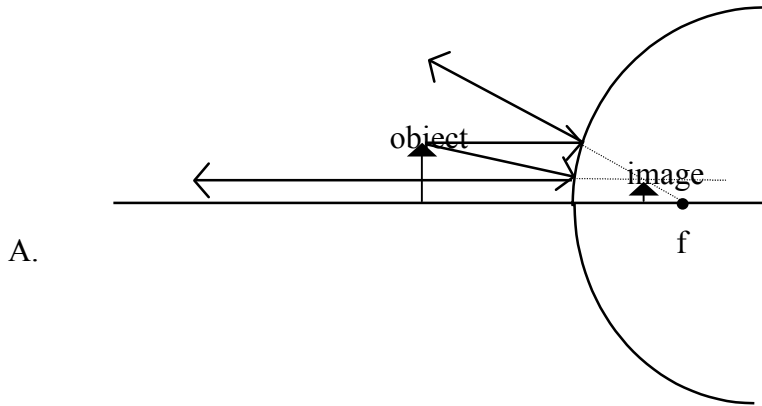
- A. at the focal point
- B. closer to the mirror than the focal point
- C. further from the mirror than the focal point
- D. the distance depends on the size of the object
- E. there will be no clear image no matter where the screen is placed
- F. none of the above



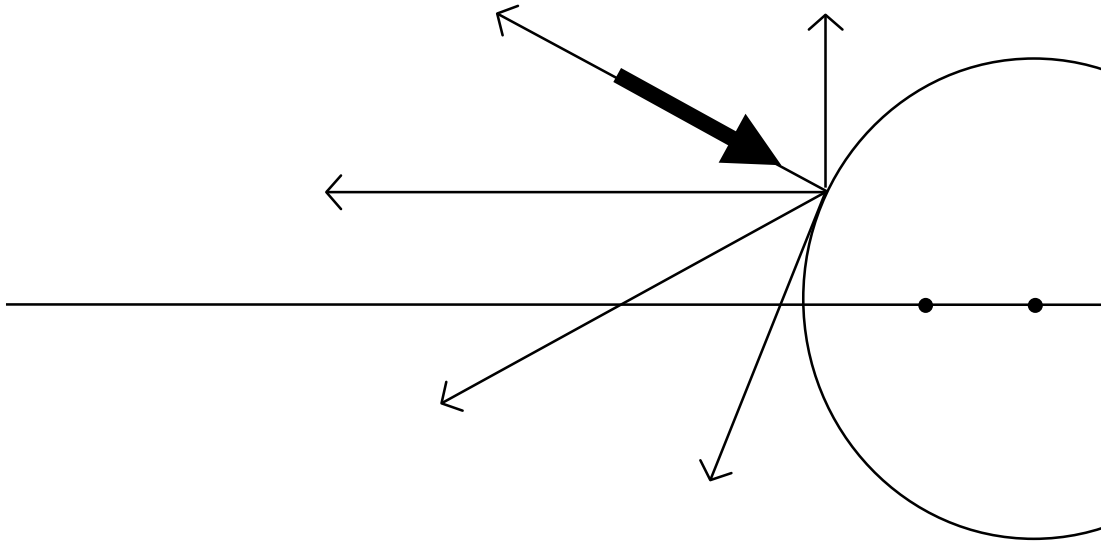
4. Which of the following is the correct ray diagram (and the correct location of the image):



5. Which one is the correct ray diagram for the convex mirror below?



6. A laser beam is hitting a shiny metal round ball and bouncing off. Which way does the beam bound off. The laser beam is the thick, dark line, and some possible choices for the way the light may bounce off are given with thin lines. Please circle the one that you feel is closest to the way it will actually occur. The ball acts like a spherical mirror and both the center of the ball, C, and its focal point, f, are marked on the diagram.



7. Which of the following light rays (going from the tip of the object arrow to the mirror) will bounce off the mirror parallel to the horizontal axis? The center of curvature and focal point of the mirror are both shown on the diagram.

- A. Ray 1 B. Ray 2 C. Ray 3

8. For the diagram to the right, where will the image of the object be located?

- A. to the right of the mirror
 B. at the focal point
 C. at the center of curvature
 D. there will be no clear image of the object
 E. none of the above

