Name:_____ **Mirror Equations Quiz** Period:_____

1. Which of the following statements regarding a real image is false?

- A. Light rays actually pass through a real image.
- B. A real image can be "captured" on a surface.
- C. Reflected light can form a real image.
- D. A real image can be located on either side of a mirror.

2. The image formed by a concave mirror is located 11.30 cm behind the mirror when an object is 3.70 cm in front of the mirror. What is the focal length of the mirror?

- A. 2.79 cm
- B. 5.49 cm
- C. -5.49 cm
- D. 15.00 cm

3. A concave spherical mirror has a focal length of 12.5 cm. The real image formed by the mirror is located 14.4 cm in front of the mirror. What is the object distance?

- A. 94.3 cm
- B. 6.69 cm
- C. -94.3 cm
- D. 9.43 cm

4. The focal length of a certain concave spherical mirror is 17.0 cm. The image distance for an object located 54.0 cm in front of the mirror is _____, and the magnification of the image is _____.

- A. 24.8 cm, -0.459
- B. 24.8 cm, 0.459
- C. 24.8 cm, -2.18
- D. -24.8 cm, -0.459

5. An object placed at the focal point of a concave mirror will

- A. form a virtual image.
- B. form a real image.
- C. form an enlarged image.
- D. not form an image.

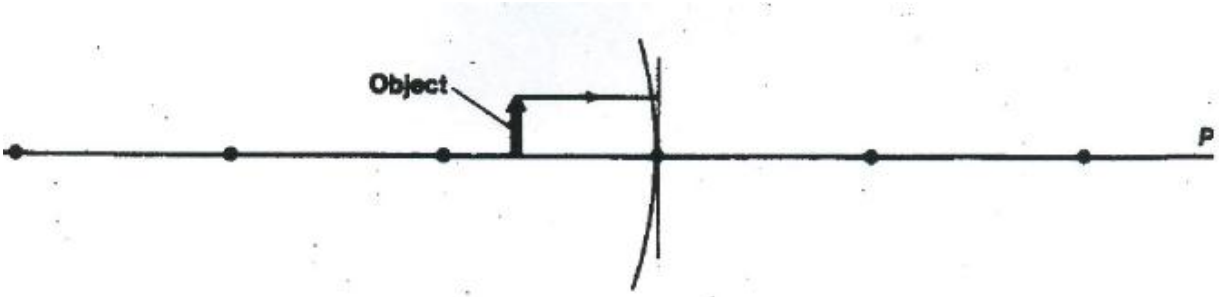
6. The image of an object located 18.8 cm in front of a convex spherical mirror appears to be located 6.50 cm behind the mirror. The focal length of the mirror is _____ cm, and the radius of curvature of the mirror is _____ cm.

- A. 4.83, 9.66
- B. -4.83, -9.66
- C. -9.90, -9.90
- D. -9.90, -19.8

7. An object is placed in front of a convex spherical mirror with a focal length of 9.00 cm. The image of the object forms 4.10 cm behind the mirror. The object is located _____, and the magnification of the image is _____.

- A. 7.52 cm behind the mirror, 0.545
- B. 7.52 cm in front of the mirror, -0.545
- C. 7.52 cm in front of the mirror, 0.545
- D. 2.82 cm in front of the mirror, 1.45

8.



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