Fill in a T/F answer for each statement below:

1. [   ] A virtual image is one in which the light rays do not converge to the image point but appear to emanate from that point.

2. [   ] At least three rays of light are needed in order to find out where the image is formed.

3. [   ] For a concave mirror, the center of curvature is also the focal point.

4. [   ] For a concave mirror, if the object distance is less than R, the image is virtual, upright, and enlarged.

5. [   ] If an object is located at the focal point of a mirror or lens, no image forms.

6. [   ] Even if you can clearly see the bottom of a swimming pool, you usually underestimate the depth of the pool.

7. [   ] Converging lenses have positive focal lengths, and diverging lenses have negative focal lengths.

8. [   ] Depending on where the object is placed, the images formed by a converging lens can either be real and inverted or virtual and upright.

9. [   ] For an image formed by a converging lens, if the object and the image have exactly the same size, the object distances must be twice of the focal length, so does the image distance.