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## Lenses and Mirrors - Applying Concepts

1. Light emanates in a variety of directions from the following point objects; some of this light is incident towards the mirror or lens. The behavior of a few such incident rays is shown below. Show how the third, fourth and / or fifth incident rays refract or reflect.

2. Several statements about images are given below. Identify which optical device applies to the given statement. Place the appropriate marks in the blanks. Mark all that apply.

$$
\begin{gathered}
A=\text { plane mirrors } \quad B=\text { concave mirrors } \quad C=\text { convex mirrors } \\
D=\text { converging lenses }
\end{gathered} \quad E=\text { diverging lenses }
$$

a. Are capable of producing real images.
b. Only produce virtual images.
c. Are capable of producing enlarged images.
d. Can only produce images that are smaller than the object.
$\qquad$
b. Only produce vitual
$\qquad$
e. Capable of producing images the same size as the object.
3. Identify the following statements as being either true (T) or false (F).
a. If reflected or refracted rays diverge, there is no image.
b. If an object is located in front of a focal point, there is no image. $\qquad$
c. Virtual images cannot be seen.
d. All images are formed by the actual convergence of reflected or refracted light.
e. Just three rays of light from an object can intersect at the image location.

