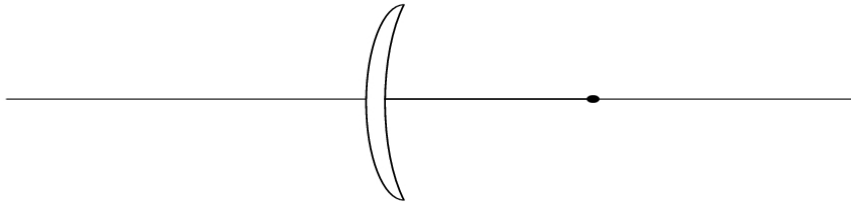


Convex Mirrors (p.205- 206)

Ray Diagrams for convex mirrors

- For the following diagram, use the following words to label the diagram:
 - **convex mirror** (reflecting surface that curves outward)
 - **principal axis** (a line perpendicular to the center of the mirror)
 - **vertex** (a point at which the principal axis meets the mirror)
 - **focal point [F]** (a point where all reflected rays intersect when all incident rays are parallel)
- Draw 3 parallel incident rays and their reflected rays. (p.198)



The focal point for a convex mirror is ALWAYS behind the mirror.

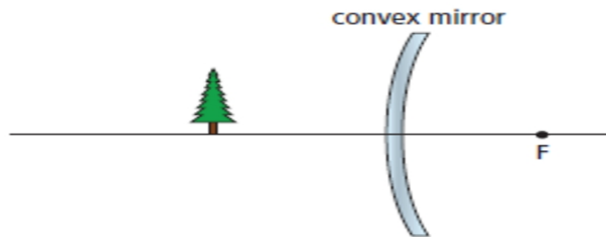
For a convex mirror, the bottom of the image stays on the principal axis, similar to the concave mirrors. To determine where the **top part of the image** is located you must draw 3 diagrams.

1st ray - PARALLEL- a ray is drawn parallel from the top of the object to the principal axis, with reflected ray going through the focal point.

2nd ray - FOCAL POINT- a ray or an extended ray is drawn through the focal point

3rd ray - VERTEX- a ray drawn to the vertex with reflecting ray drawn at the same angle.

****Note:** You need to extend your rays behind the mirror to find out where they meet to form a virtual image.



Size- _____
 Position- _____
 Orientation- _____
 Type- _____