Concave Mirrors: Object-Image Relationships

Lesson Notes

Learning Outcomes

- How do you describe the images of objects that are produced by a concave mirror?
- How does the description vary with object location?

L•O•S•T Art of Image Description

The characteristics of a concave mirror image depends upon where the object is located. You will need to be able to exercise the **L•O•S•T Art of Image Description**.

Location: Beyond C, at C, between C and F, behind mirror

Orientation: Upright (same as object) or Inverted (flipped)

Size: Magnified in size, reduced in size, or same size

Type: Real or Virtual

For each situation below, describe the location (L), orientation (O), size (S), and type (T) of image that is produced for the varying object locations.

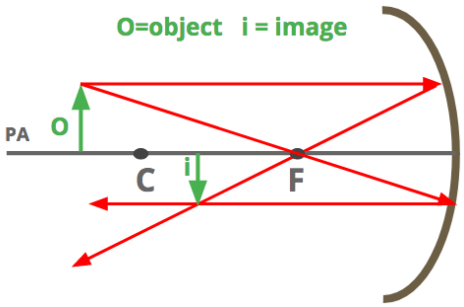
Situation 1: Object Beyond C

Location: _____

Orientation: _____

Size: _____

Type: _____



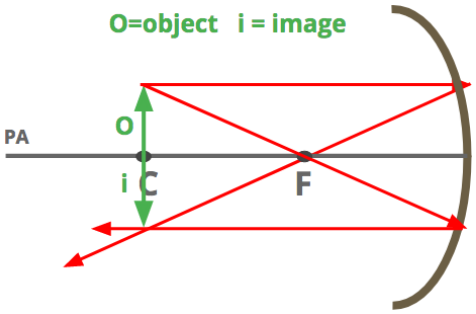
Situation 2: Object At C

Location: _____

Orientation: _____

Size: _____

Type: _____



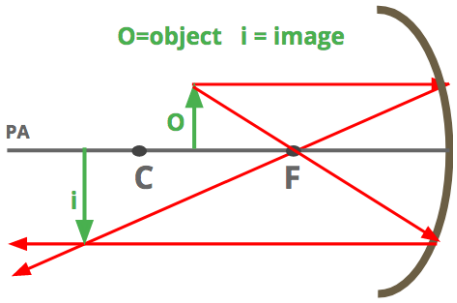
Situation 3: Object Between C and F

Location: _____

Orientation: _____

Size: _____

Type: _____



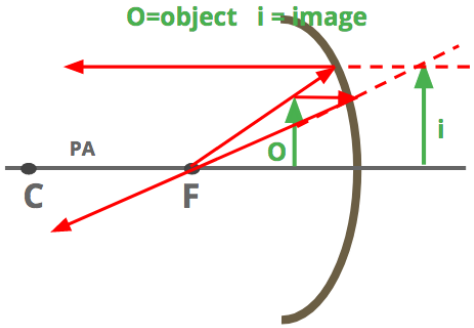
Situation 4: Object Between F and Mirror

Location: _____

Orientation: _____

Size: _____

Type: _____



Object-Image Relationships - Summary Table

The characteristics of the image depend upon where the object is located.

Object Location	Image Orientation	Image Size	Image Type	Image Location
Beyond C	Inverted	Reduced	Real	Between C and F
At C	Inverted	Same size	Real	At C
Between C and F	Inverted	Magnified	Real	Beyond C
Between F and Mirror	Upright	Magnified	Virtual	Behind Mirror