

# MIRROR QUICK PRACTICE QUIZ

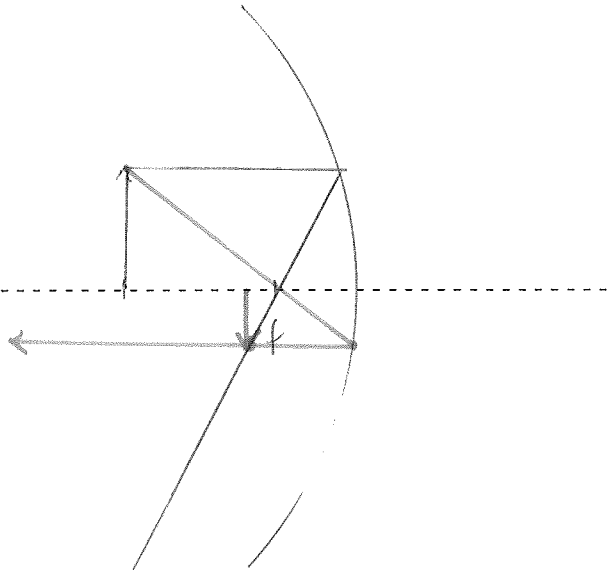
1. A 1.5 cm tall object is placed a distance of 3 cm from a mirror with a focal length of 1 cm. Find the  $q$  and  $h_i$  using a diagram AND equations for both types of mirrors:

Concave:  $p = 3$ ,  $h_o = 1.5$ ,  $f = 1$

Equations:

$$\frac{1}{1} = \frac{1}{3} + \frac{1}{q} \quad q = 1.5$$

$$\frac{h_i}{1.5} = \frac{-1.5}{3} \quad h_i = -0.75$$



$q =$  \_\_\_\_\_  
 $h_i =$  \_\_\_\_\_

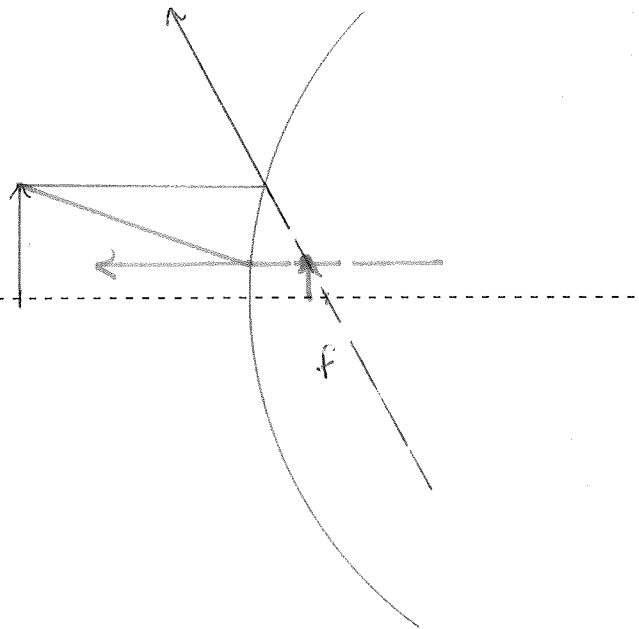
$q = 1.5 \text{ cm}$   
 $h_i = -0.75$

Convex:  $p = 3$ ,  $h_o = 1.5$ ,  $f = -1$

Equations:

$$\frac{1}{-1} = \frac{1}{3} + \frac{1}{q} \quad q = -0.75$$

$$\frac{h_i}{1.5} = \frac{+0.75}{3} \quad h_i = 0.375$$



$q =$  \_\_\_\_\_  
 $h_i =$  \_\_\_\_\_

$q = -0.75$   
 $h_i = 0.375$