Magnification and Mirrors

Curved mirrors can change the size of the image by making it either larger or smaller.

We describe this effect by using the term __________________.

Magnification is a numerical value that ___________________________________

-
-
-

We can use the magnification value to describe the change in size or even the change in distance from the mirror

The Magnification Formula

$$M = \frac{hi}{ho}$$

hi = _____________ ho = __________________

OR

$$M = \frac{di}{do}$$

di = _____________ do = __________________

We can also combine both equations to figure out heights if we know the distances.

Magnification and Mirrors

Curved mirrors can change the size of the image by making it either larger or smaller.

We describe this effect by using the term magnification.

Magnification is a numerical value that compares the image to the object

- If magnification is greater than 1 (M>1) the image is larger than the object
- If magnification is less than 1 (M<1) the image is smaller than the object
- If magnification equals 1 (M=1) then the image is the same size as the object

We can use the magnification value to describe the change in size or even the change in distance from the mirror

The Magnification Formula

$$M = \frac{hi}{ho}$$

hi = height of the image   ho = height of the object

$$hi = M \times ho \qquad ho = \frac{hi}{M}$$

OR

$$M = \frac{di}{do}$$

di = distance of the image   do = distance of the object

$$di = M \times do \qquad do = \frac{di}{M}$$

We can also combine both equations to figure out heights if we know the distances.

$$\frac{hi}{ho} = \frac{di}{do}$$