# Tutorial: Ray tracing for plane mirrors 

(source: www.miniphysics.com)

How we can use ray tracing to find the images in a plane mirror:


Here an object is sits in front of a plane mirror and we want to find the image an observer represented by the eye will see.

First, we draw an image of the object on the other side of the mirror:


Distance $A$ is equal to distance $B$ and the image size is the same size as the object size. Then we draw light rays from the image to the eye.


The image is virtual. Broken lines from the image to mirror indicate virtual rays.

Virtual image: Light rays do not actually meet at the image position. Because of that, a virtual image cannot be projected on a screen.
Then we join the light rays from the mirror to the object:


## Properties of image formed in plane mirror:

- Same size as object
- Laterally inverted (Left becomes right, right becomes left)
- Upright
- Virtual
- As far behind the mirror as the object is in front

