

# Mirrors and Reflection

When a cast ray hits a mirrored surface, it bounces off in the reflected direction

Angle of reflection is identical to angle of incidence (relative to the mirror's normal)

The colour of the pixel on the image plane, depends on what the bounced ray eventually hits !

Mirror

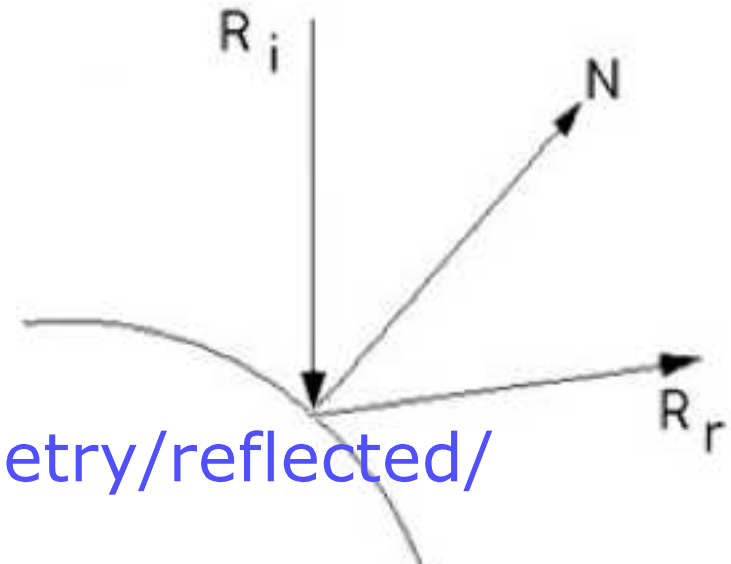
# Vector of Reflection

Calculating the vector of Reflection ( $R_r$ )

Is slightly more complicated than you might think !

It can be calculated using the following equation:

$$R_r = R_i - 2 N (R_i \cdot N)$$



For the derivation, see:

<http://paulbourke.net/geometry/reflected/>

# 3D Mirror Example

