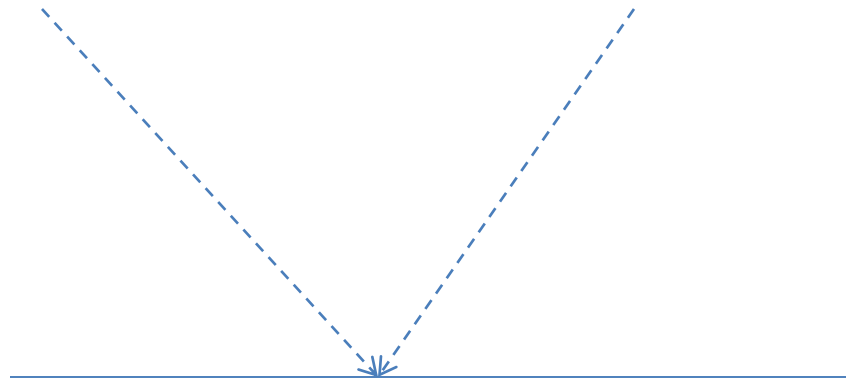


# Light

- Reflection – the “bouncing” of light off of a surface. The light does not pass through the surface (called a medium),
- Refraction – is the “bending of light as it passes from one medium to another
- Dispersion – is the “splitting” of light into its various colours and
- Absorption – is the complete transmission of light into a medium (the light enters but does not exit)

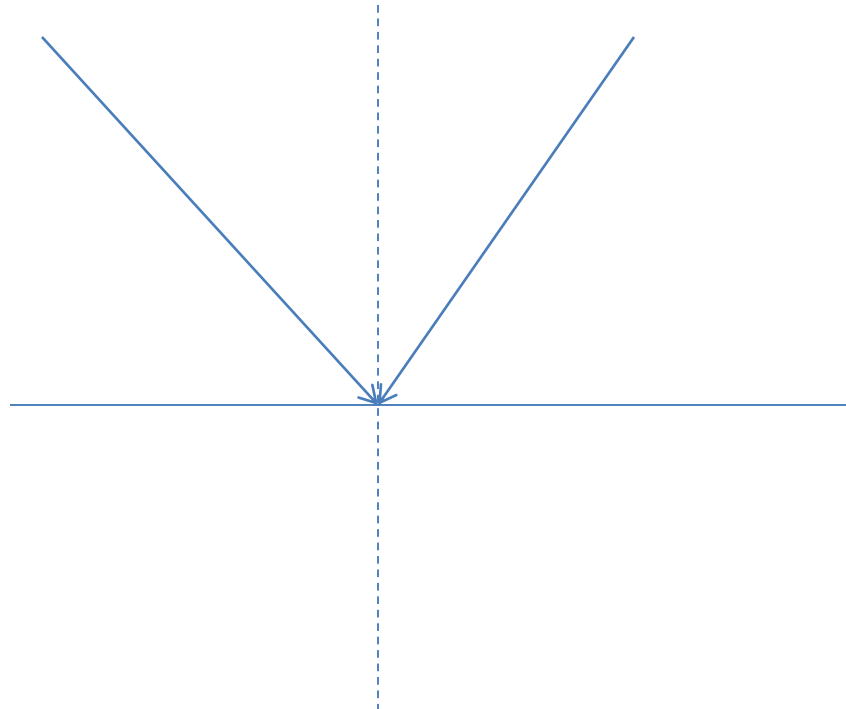
# Reflection

- Trace the dots to the mirror and from the mirror below...this is the path a ray of light will follow when it is incident on a mirror



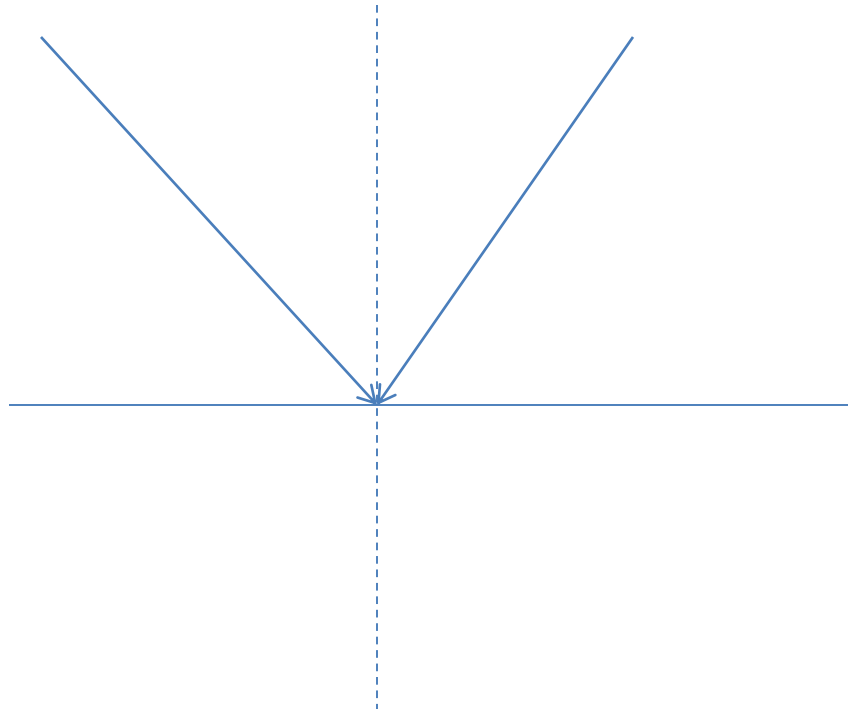
# Reflection

- One law of reflection is that the incident ray, the reflected ray and the normal all lie in the same plane



# Reflection

- Another law of reflection is that the angle of incidence is equal to the angle of reflection. For example if the incident ray “hits” the mirror at  $45^\circ$ , then the reflected ray bounces off the mirror at a  $45^\circ$  angle. ( $^\circ$  - this is the degree symbol)



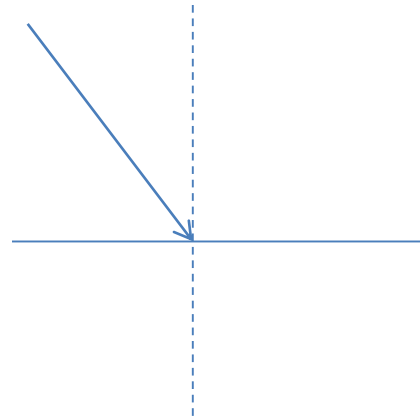
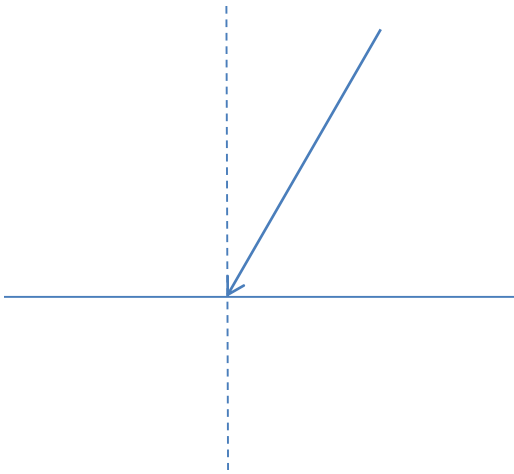
# Reflection

An image formed in a mirror is

- not real (it is called Virtual)
  - It is the same distance it is from the front of the mirror as the back of the mirror
  - It is upright
-

# DO IN CLASS

- State the two laws of reflection.
- Draw the missing ray and label it reflected ray or incident ray:



- If the reflected ray bounces off a mirror at a  $28^\circ$  angle, at what angle did the incident ray “hit” the mirror?