

Light and Optical Systems

Topic 3 - Refraction Practice Quiz

1. Refraction is the bending of light when it travels from one medium to another. What direction does the light bend when it travels from a medium of greater density to one of lesser density?
along the normal

along the perpendicular

towards the normal

away from the normal

2. When light is refracted, the angle of incidence increases and the angle of refraction ...
depends on the intensity of the light

increases, depending on the material

decreases, but only by one half

increases by double

3. Mirages cause an illusion of a watery surface. This illusion is actually ...
water drops reflecting the light

water drops refracting the light

the sky refracted by warm air

the sky reflected by warm air

4. When light strikes a surface and is absorbed, the light ...

changes into another form of energy

bounces off in many different directions

travels through it in a different direction

happens only when it is a smooth shiny surface

5. During refraction, when the angle of incidence is doubled, the angle of refraction is ...

also doubled

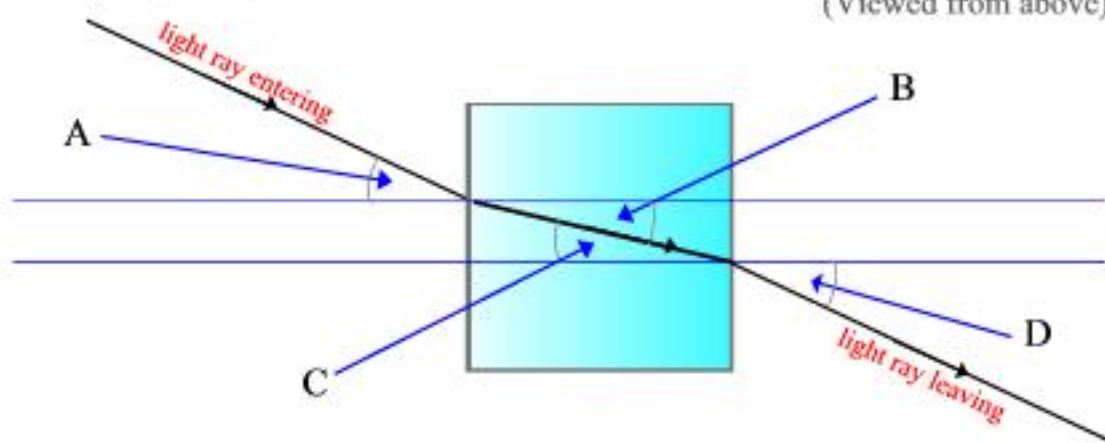
not necessarily doubled

decreased by the same amount

decreased by about half

6. Label the angles produced when a light ray goes through a refraction tank.

(Viewed from above)



A is the angle of _____

B is the angle of _____

C is the angle of _____

D is the angle of _____

Check your
Answers

Light and Optical Systems

Topic 3 - Refraction Practice Quiz

1. Refraction is the bending of light when it travels from one medium to another. What direction does the light bend when it travels from a medium of greater density to one of lesser density?
along the normal

along the perpendicular

towards the normal

away from the normal (Text p. 204) Figure 3.27

2. When light is refracted, the angle of incidence increases and the angle of refraction ...
depends on the intensity of the light

increases, depending on the material (Text p. 204) Figure 3.27

decreases, but only by one half

increases by double

3. Mirages cause an illusion of a watery surface. This illusion is actually ...
water drops reflecting the light

water drops refracting the light

the sky refracted by warm air (Text p. 205) Figure 3.28

the sky reflected by warm air

4. When light strikes a surface and is absorbed, the light ...

changes into another form of energy (Text p. 205) Table 3.1

bounces off in many different directions

travels through it in a different direction

happens only when it is a smooth shiny surface

5. During refraction, when the angle of incidence is doubled, the angle of refraction is ...

also doubled

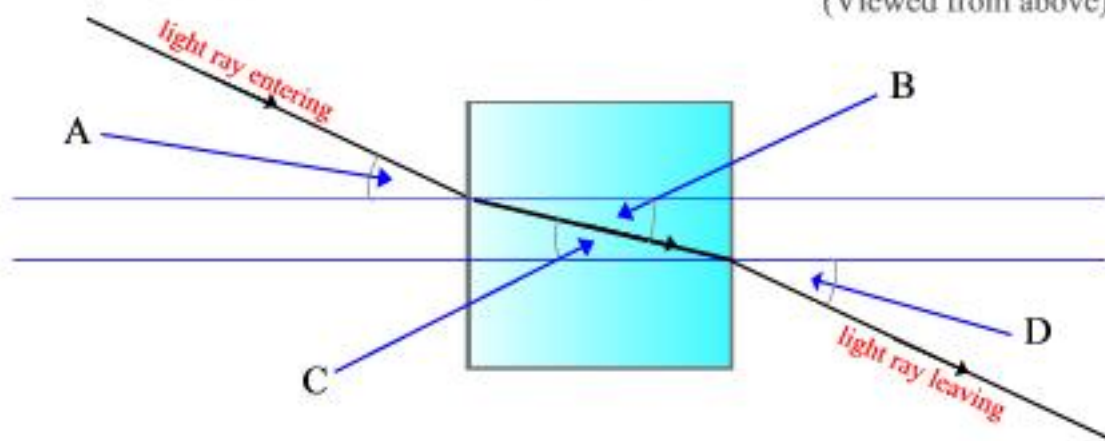
not necessarily doubled (Text p. 216) Figure 3.35

decreased by the same amount

decreased by about half

6. Label the angles produced when a light ray goes through a refraction tank.

(Viewed from above)



(Text p.204) Figure 3.27

A is the angle of ___ **incidence** ___

B is the angle of ___ **refraction** ___

C is the angle of ___ **incidence** ___

D is the angle of ___ **refraction** ___