

Answer on Question #41503 – Physics – Other

Question.

Refraction is a measure of the ----- as a wave passes from medium to another

velocity
frequency
wavefront
displacement

Solution.

In optics the refractive index or index of refraction n is:

$$n = \frac{c}{v}$$

c is the speed of light in vacuum;

v is the speed of light in the substance.

Refraction is the change in direction of a wave when it enters a medium where its speed is different. Due to change of medium, the phase velocity of the wave is changed but its frequency remains constant. So, refraction is a measure of the change in direction and velocity of a wave as a wave passes from medium to another.

Answer.

velocity

displacement (as a change in direction)