2. The index of refraction is defined as the ratio of the speed of light in a vacuum to the speed of light in the material of interest.

$$n = c / v$$

We multiply both sides of the equation by v and divide both sides of the equation by n to obtain an expression for the speed of light in the water.

$$v = c / n$$

$$v = (3 \times 10^8 \ m / s) / 1.33$$

$$v = 2.26 \times 10^8 \ m / s$$