

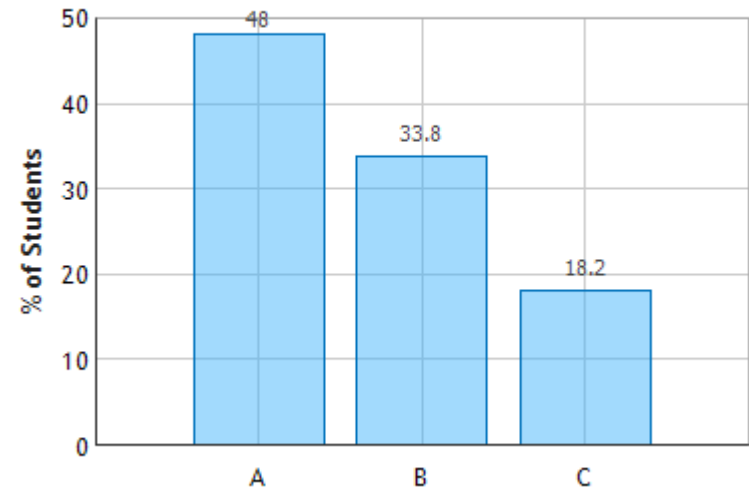
Checkpoint 2



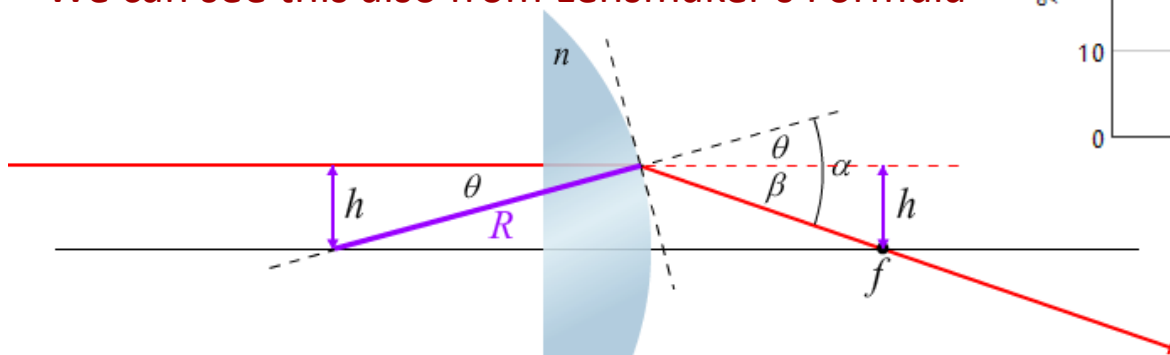
What happens to the focal length of a converging lens when it is placed under water?

- A. Increases
- B. Decreases
- C. Stays the same

A Lens in Water: Question 1 (N = 779)



We can see this also from Lensmaker's Formula



Lensmaker's Formula

$$\frac{1}{f} = (n - 1) \frac{1}{R}$$

n_{lens} n_{air}

$$\frac{1}{f} = (1.5 - 1.1) \frac{1}{R} \quad \rightarrow \quad \frac{1}{f} = (1.5 - 1.3) \frac{1}{R}$$