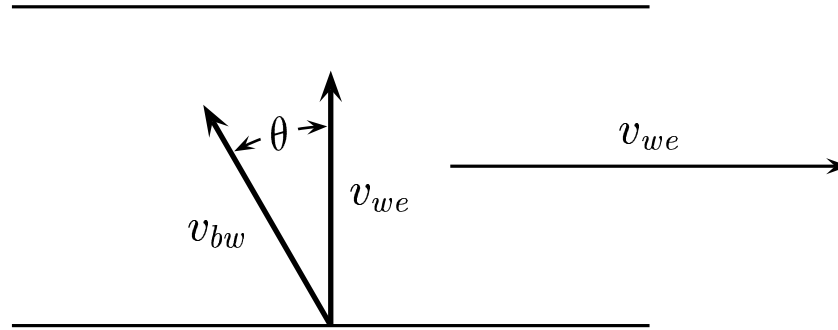


Given: The boat speed is $v_{bw} = 10$ m/s relative to the water. Water flow is $v_{we} = 5$ m/s relative to the Earth.



Find the angle θ such that the boat crosses the river at a right angle to the bank.

- A) $\theta = 30^\circ$
- B) $\theta = 45^\circ$
- C) $\theta = 60^\circ$

$$\sin \theta = \frac{v_{we}}{v_{bw}} = \frac{5}{10} = 0.5, \theta = 30^\circ.$$

Answer **A**.