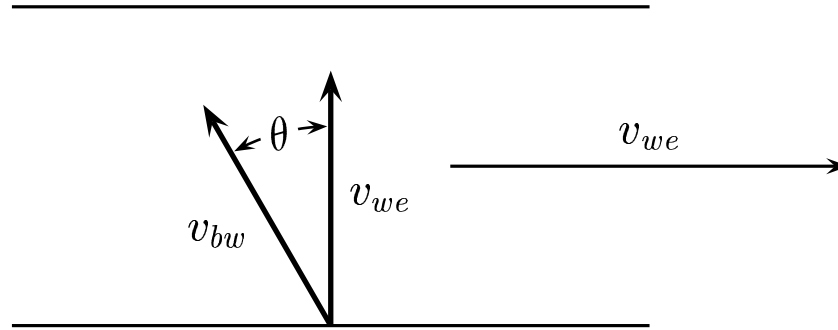


Given: The boat speed is  $v_{bw} = 10$  m/s relative to the water. Water flow is  $v_{we} = 5$  m/s relative to the Earth.



Find the angle  $\theta$  such that the boat crosses the river at a right angle to the bank.

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

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

Answer **A**.