

- 9** Two ice boats, of masses m and $2m$, are made to compete in a race on a frictionless frozen lake. The boats have identical sails so that the wind pushes them forward with the same force. The two boats start from rest and travel the same distance.

Which of the following statements is correct?

- A** The boat of mass m will win the race but the two boats will have the same final speed.
- B** The boat of mass m will win the race but it will have a lower final kinetic energy.
- C** The boat of mass m will win the race and it will have a higher final kinetic energy.
- D** The boat of mass m will win the race but the two boats will have the same final kinetic energy.