

**12** An object in a space capsule orbiting the Earth seems to be floating.

Which statement describes the forces acting on the object within the capsule?

- A** The centripetal force on the object is equal and opposite to its weight.
- B** The resultant force is equal to the centripetal force added to its weight.
- C** The weight of the object is the only force acting on it.
- D** There are no forces on the object.

**13** A man is attached to a windsail and a rope, as shown. The man is pulled by a boat at a constant