

- 13** A cylindrical block of wood has cross-sectional area A and weight W . It is totally immersed in water with its axis vertical. The block experiences pressures p_t and p_b at its top and bottom surfaces respectively.

Which expression is equal to the upthrust on the block?

- A** $(p_b - p_t)A + W$
- B** $(p_b - p_t)$
- C** $(p_b - p_t)A$
- D** $(p_b - p_t)A - W$

- 14** A car of mass m travels at constant speed up a slope at an angle θ to the horizontal, as shown in