

- 14 A cylindrical block of wood has a 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 of the following expressions 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  $(p_b - p_t)A - W$

- 15 The vector diagram shows three coplanar forces acting on an object at P.