6 A cylindrical block of wood has a cross-sectional area A and weight W. It is completely 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 $(p_b - p_t)A - W$