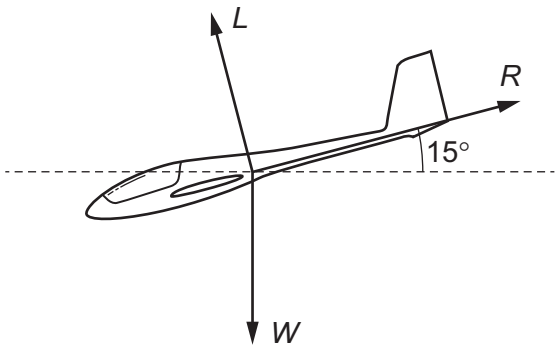
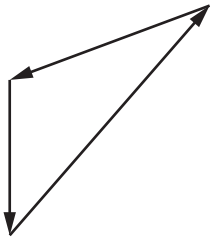
14 A glider is descending at constant speed at an angle of 15° to the horizontal. The diagram shows the directions of the lift *L*, air resistance *R* and weight *W* acting on the glider.



Which vector triangle could represent the forces acting on the glider?

A

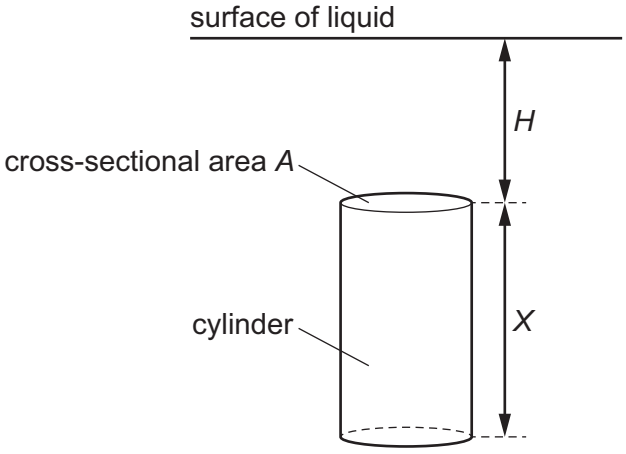


B

C

D

15 A solid cylinder of density ρ_C, cross-sectional area *A* and length *X* is submerged in a liquid of density ρ_L. The upper face of the cylinder is at a depth *H* below the surface of the liquid, as shown.



The acceleration of free fall is *g*.

Which expression gives the magnitude of the upthrust force acting on the cylinder?

A $\rho_C AHg$ **B** $\rho_C AXg$ **C** $\rho_L AHg$ **D** $\rho_L AXg$