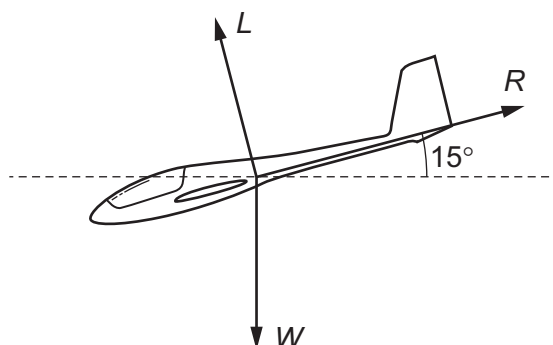
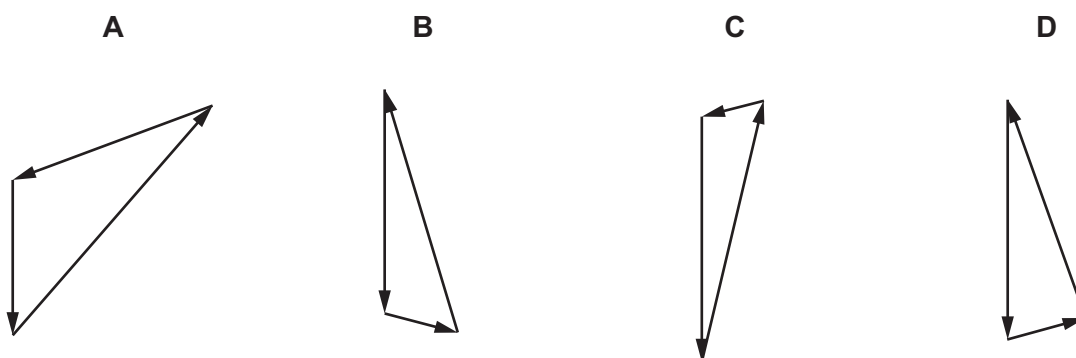


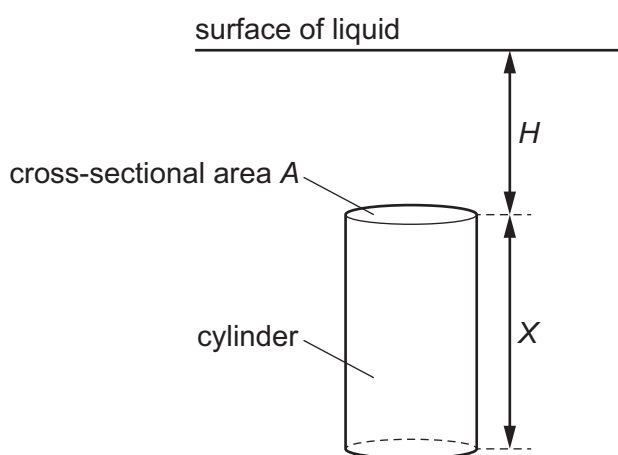
- 14 A glider is descending at constant speed at an angle of 15° to the horizontal. The diagram shows the directions of the lift L , air resistance R and weight W acting on the glider.



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



- 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 $\rho_C A H g$ B $\rho_C A X g$ C $\rho_L A H g$ D $\rho_L A X g$