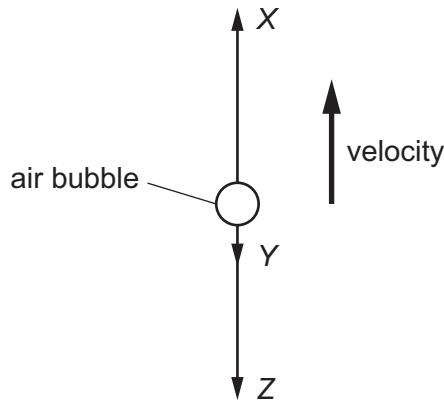


- 9 An air bubble in a tank of water is rising with terminal (constant) velocity. The forces acting on the bubble are  $X$ ,  $Y$  and  $Z$ , as shown.



The upthrust on the bubble is  $X$ .

Which statement about the forces is correct?

- A  $Z$  is the viscous force on the bubble,  $Y$  is the weight of the bubble and  $X = Y + Z$ .
- B  $Z$  is the viscous force on the bubble,  $Y$  is the weight of the bubble and  $X > Y + Z$ .
- C  $Z$  is the weight of the bubble,  $Y$  is the viscous force on the bubble and  $X = Y + Z$ .
- D  $Z$  is the weight of the bubble,  $Y$  is the viscous force on the bubble and  $X > Y + Z$ .