

- 6 A bullet is fired horizontally with speed v from a rifle. For a short time t after leaving the rifle, the only force affecting its motion is gravity. The acceleration of free fall is g .

Which expression gives the value of $\frac{\text{the horizontal distance travelled in time } t}{\text{the vertical distance travelled in time } t}$?

A $\frac{vt}{g}$

B $\frac{v}{gt}$

C $\frac{2vt}{g}$

D $\frac{2v}{gt}$

Space for working