

- 11** A body, initially at rest, explodes into two masses M_1 and M_2 that move apart with speeds v_1 and v_2 respectively.

What is the ratio $\frac{v_1}{v_2}$?

- A** $\frac{M_1}{M_2}$ **B** $\frac{M_2}{M_1}$ **C** $\left(\frac{M_1}{M_2}\right)^{\frac{1}{2}}$ **D** $\left(\frac{M_2}{M_1}\right)^{\frac{1}{2}}$

- 12** A submarine descends vertically at constant velocity. The three forces acting on the submarine