

- 5** A car has an initial velocity  $u$ . The car then moves with constant acceleration  $a$  in a straight line through a displacement  $d$ . The car reaches a final velocity  $v$ .

Which expression gives the initial velocity  $u$  of the car?

**A**  $v - ad$

**B**  $\sqrt{v^2 - 2ad}$

**C**  $v + ad$

**D**  $v - \frac{1}{2}ad^2$