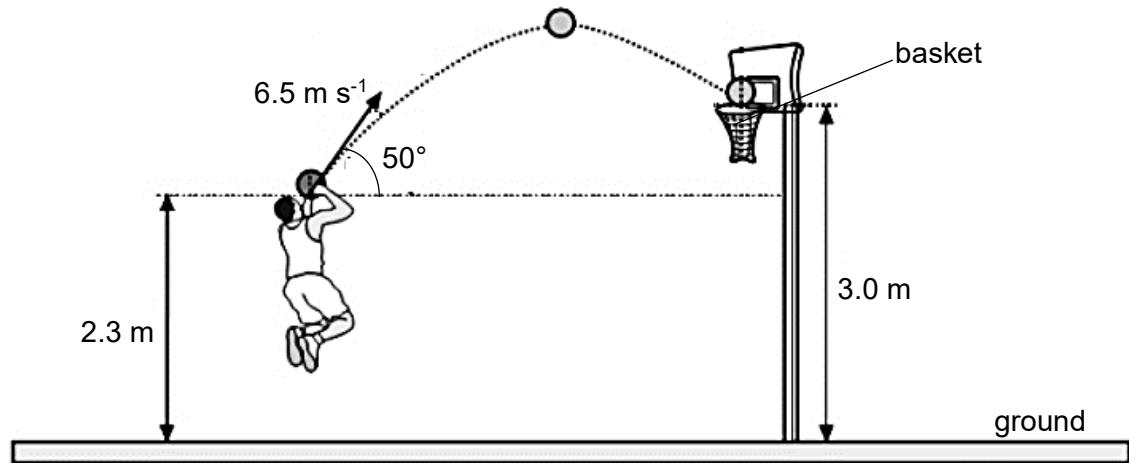


- 2 A basketball player throws a ball with an initial velocity of  $6.5 \text{ m s}^{-1}$  at an angle of  $50^\circ$  to the horizontal. The ball is  $2.3 \text{ m}$  above the ground when released and passes through the basket on its way down.



What is the time taken for the ball to reach the top of the basket which is  $3.0 \text{ m}$  above the ground?

- A  $0.17 \text{ s}$       B  $0.36 \text{ s}$       C  $0.54 \text{ s}$       D  $0.85 \text{ s}$