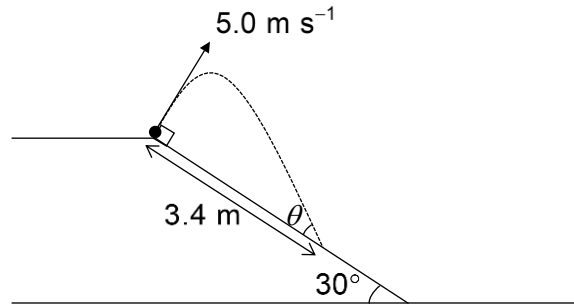


- 3 A stone is projected perpendicularly to a slope with a velocity of  $5.0 \text{ m s}^{-1}$  and lands  $3.4 \text{ m}$  down the slope. The slope is inclined at an angle of  $30^\circ$  to the horizontal. Air resistance is negligible.



What is the angle  $\theta$  that the velocity of the stone makes with the slope as it lands?

- A**  $27^\circ$                       **B**  $32^\circ$                       **C**  $41^\circ$                       **D**  $71^\circ$