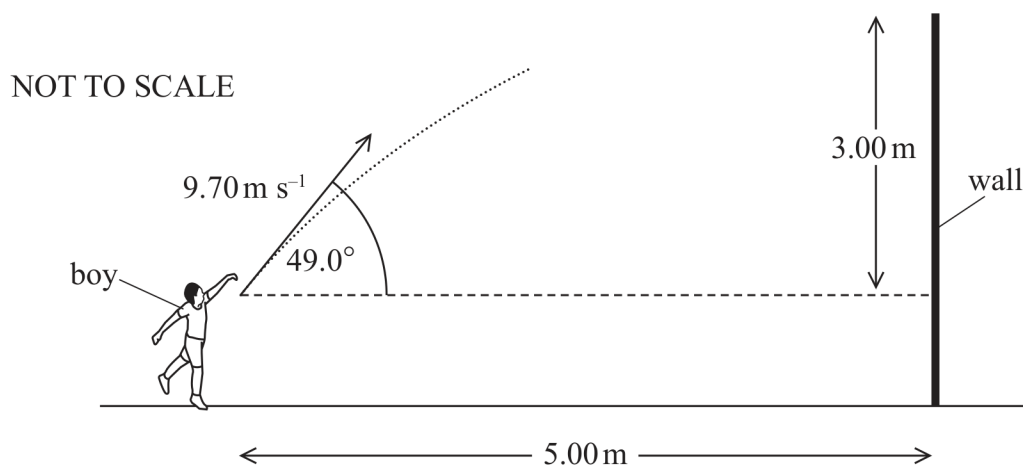


- 15 A boy was throwing a ball towards a wall. The wall was 5.00 m from the boy. The top of the wall was 3.00 m above the point where the boy released the ball.

The boy tried to throw the ball over the wall but sometimes the ball hit the wall.

In one attempt, the boy threw the ball with an initial velocity of 9.70 m s^{-1} at an angle to the horizontal of 49.0° , as shown.



- (a) Show that the ball travelled the distance to the wall in about 0.8 s.

(3)

(b) Deduce whether or not the ball went over the wall for this attempt.

(4)

(Total for Question 15 = 7 marks)