

2-11. A 1 kg ball is thrown with an initial normally distributed speed of $v_A \sim N(20, 2^2)$ m/s. If $\theta = 45^\circ$, determine the distributions of the time for the ball to reach its highest point B and its speed at B .

Solutions: $t_B \sim N(1.44, 0.14^2)$ s and $v_B \sim N(14.14, 1.41^2)$ m/s.

