

## Quiz 1

A ping pong ball (mass = 3 g), is struck and moves with a speed of 20 m/s to the right and downward at an angle of  $30^{\circ}$  to the vertical. The ball bounces and then moves upward at the same angle and with the same speed. What is the ball's change in momentum (expressed as a vector) during this interaction? *Note: remember to express your answer using SI units!* 

