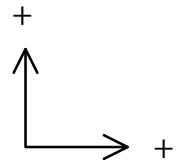


## P11 - 5.1 - Momentum



What is the momentum of a 20 kg object moving at 5 m/s?

What is the momentum of a 2000 kg object moving at 30 m/s?

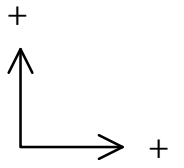
A 3 kg ball of glue with the velocity of 8 m/s is thrown directly at a wall where it comes to a complete stop. What is the ball's change in momentum?

A water balloon of 2 kg with a velocity of 3 m/s is thrown directly at a wall where it explodes. What is the ball's change in momentum?

A 1 kg soccer ball with the velocity of 8 m/s is kicked directly at a wall where it bounces off the wall at 4 m/s. What is the soccer ball's change in momentum?

A 40 kg football player with the velocity of 5 m/s tackles another football player who he bounces off of at 2 m/s. What is the football player's change in momentum?

## P11 - 5.1 - Momentum Hmk



A 1 kg snow ball is thrown directly at a wall at 10 m/s where it hits the wall and smashes in 0.3 seconds. What is the net force exerted on the wall by the snowball?

A pitcher throws a 0.2 kg ball with the velocity of 25 m/s directly at a catcher who stops the ball exerting a force of 30 N on the ball. How long does it take for the ball to stop?