

## Worksheet: Impulse Practice (EXTRA)

NAME:

$$\text{Impulse} = \text{Force} \times \text{time}$$

1. In order to triple the impulse while keeping the force same, what must happen?
  
  
  
  
  
  
  
  
  
  
2. In order to quadruple the impulse while keeping the time the same, what must happen?
  
  
  
  
  
  
  
  
  
  
3. What happens to the impulse if the force is halved, but the time remains the same?
  
  
  
  
  
  
  
  
  
  
4. If the time is halved, and the force is tripled, what happens to the impulse?
  
  
  
  
  
  
  
  
  
  
5. How can the impulse remain the same, if the time doubled?

6. A force of 23.1 N is applied to a soccer ball for 0.34 seconds. What is the impulse?
  
  
  
  
  
  
  
  
  
  
7. An impulse of 56.4 Ns was applied for 2.39 seconds. What was the force?
  
  
  
  
  
  
  
  
  
  
8. Two cars collide with a force of 4300 Newtons over 0.31 seconds. What was the impulse?
  
  
  
  
  
  
  
  
  
  
9. A force of 9.34N is applied to a tennis ball for 0.62 seconds. What was the impulse on the ball?
  
  
  
  
  
  
  
  
  
  
10. An impulse of 319 Ns is applied by a 582 N force. How long was the collision?