Momentum

$$p = mv$$

1. Find the momentum of a truck of mass 2,000 kg moving at a speed of 14 ms^{-1}

2. A meteor of mass 80 kg is moving with speed 300 ms^{-1}.
Find the momentum of the meteor.

3. The Apollo 11 command module has a mass of 30,000 kg and moves with a speed of 1500 ms^{-1}. Find its momentum.

4. The momentum of a 50 kg space ship is 2,500 kg ms^{-1}. Find its speed.

5. A small ball of mass 0.25 kg has a momentum of 8 kg ms^{-1}. Determine the speed of the ball.

6. A 70 kg skier has a momentum of 280 kg ms^{-1}. Find the speed of the skier.

7. A 2000 kg truck has kinetic energy of 144,000 J. Determine the momentum of the truck.

8. A 70 kg skateboarder has kinetic energy of 2,240 J. Determine the momentum of the skateboarder.

9. A asteroid has kinetic energy 1.35 x 10^{11} J. It has a mass of 3 x 10^6 kg. Determine the momentum of the asteroid.