

Momentum Practice Exercises

I. Given the following data, solve for momentum using the formula $p=mv$.
Type your answer on the box.

Object	Mass (kg)	Velocity (m/s)	Momentum (kg·m/s)
Bird	0.03	18	
Basketball player	100	5	
Bullet	0.004	600	
Baseball	0.14	30	
Frog	0.9	12	

II. From the concepts that you have learned, answer the check-up questions. Click the correct answer.

1. Which has more momentum?
2. A moving car has momentum. If it moves twice as fast, its momentum would be _____ as much.
3. Two cars, one twice as heavy as the other, moves down a hill at the same time. The heavier car would have a _____ momentum.

III. Applying the equation learned, answer the following problems. Click the correct answer.

1. The bowling ball whose mass is 4.0kg is rolling at a rate of 2.5 m/s. What is its momentum?
2. A skateboard is rolling at a velocity of 3.0 m/s with a momentum of 6.0 kg·m/s. What is its mass?
3. A pitcher throws a baseball with a mass of 0.5 kg and a momentum of 10 kg·m/s. What is its velocity?