Kinetic Energy Practice

Physics and Mathematics of Sustainable Energy

College of the Atlantic. September 12, 2025

1. An 80 kg football player runs at 5 m/s. What is his kinetic energy?

2. A 120 pound hockey player skates at 8 m/s. What is her kinetic energy?

3. An 8000 pound bus travels at 40 mi/hr. What is the kinetic energy of the bus? Answer in Joules and MegaJoules.

4. A 1kg brick of tofu has a speed of 10 m/s. What is its kinetic energy? If the same brick of tofu had a speed of 20 m/s, what would its kinetic energy be?

5. A small car moving at a certain speed has a kinetic of 50,000 J. What would the car's kinetic energy be if it doubled its speed? What would the cars kinetic energy be if it doubled its mass?

6. A 145 g baseball is thrown at 100 mi/hr. What is the baseball's kinetic energy?