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Ch 5.2 - Page 166 - Practice Problems B – Kinetic Energy

1. Calculate the speed of an 8.0 x 104 kg airliner with a kinetic energy of 1.1 x 109 J.
2. What s the speed of a 0.145 kg baseball if its kinetic energy is 109 J?
3. Two bullets have masses of 3.0 g and 6.0 g respectively. Both are fired with a speed of 40.0 m/s. Which bullet has more kinetic energy? What is the ratio of their kinetic energies?
4. Two 3.0 g bullets are fired with the speeds of 40.0 m/s and 80.0 m/s respectively. What are their kinetic energies? Which bullet has more kinetic energy? What is the ratio of their kinetic energies?
5. A car has kinetic energy of 4.32 x 105 J when traveling at a speed of 23 m/s. What is it mass?