### 5.2 Review Questions

1. How much potential energy does a 15 Kg rock have if it is 5.0 m above the ground?
2. What is the mass of an object if it has $10,000 \mathrm{~J}$ of PE when it is 50 m above the ground?
3. How much PE does a 10 kg object have if it is 3.0 m high?
4. Which has more energy a 5 kg rock 4 m high, or a 4 kg rock 5 m high?
5. (This one is a little tougher. You are solving for $\mathbf{g}$ ). When an object is held 1.5 m off the ground on Earth it has 88.2 J of PE. When it is brought to another planet and held 1.5 m off the ground, it has 15.0 J of PE. What is the gravitational field strength of the planet?
