

WEIGHT, FRICTION, AND NORMAL FORCE

Review questions

- 34.** Explain the relationship between mass and weight.
- 35.** A 0.150 kg baseball is thrown upward with an initial speed of 20.0 m/s.
- What is the force on the ball when it reaches half its maximum height?
 - What is the force on the ball when it reaches its peak? (Disregard air resistance.)
- 36.** Draw a force diagram showing the weight and normal forces on a laundry basket in each of the following situations:
- at rest on a horizontal surface
 - at rest on a ramp inclined 12° above the horizontal
 - at rest on a ramp inclined 25° above the horizontal
 - at rest on a ramp inclined 45° above the horizontal
- 37.** If the basket in item 36 has a mass of 5.5 kg, find the magnitude of the normal force for the situations described in (a) through (d).