

Practice F, p. 181

- 66 kW
- 2.61×10^8 s (8.27 years)
- a. 7.50×10^4 J
b. 2.50×10^4 W

5 Review, pp. 184–189

- 53 J, -53 J
- 47.5 J
- 7.6×10^4 J
- 2.0×10^1 m
- a. 5400 J, 0 J; 5400 J
b. 0 J, -5400 J; 5400 J
c. 2700 J, -2700 J; 5400 J
- 12.0 m/s
- 17.2 s
- a. 0.633 J
b. 0.633 J
c. 2.43 m/s
d. 0.422 J, 0.211 J
- 5.0 m
- 2.5 m
- a. 61 J
b. -45 J
c. 0 J
- a. 28.0 m/s
b. 30.0 m above the ground
- 0.107
- a. 66 J
b. 2.3 m/s
c. 66 J
d. -16 J

CHAPTER 6**Practice A, p. 199**

- 2.5×10^3 kg•m/s to the south
- 46 m/s to the east

Practice B, p. 201

- 3.8×10^2 N to the left
- 16 kg•m/s to the south

Practice C, p. 203

- 5.33 s; 53.3 m to the west
- a. 1.22×10^4 N to the east
b. 53.3 m to the west

Practice D, p. 209

- 1.90 m/s
- a. 12.0 m/s
b. 9.6 m/s

Practice E, p. 214

- 3.8 m/s to the south
- 4.25 m/s to the north
- a. 3.0 kg
b. 5.32 m/s

Practice F, p. 216

- a. 0.43 m/s to the west
b. 17 J
- a. 4.6 m/s to the south
b. 3.9×10^3 J

Practice G, p. 219

- a. 22.5 cm/s to the right
b. $KE_i = 6.2 \times 10^{-4}$ J = KE_f
- a. 8.0 m/s to the right
b. $KE_i = 1.3 \times 10^2$ J = KE_f

6 Review, pp. 223–227

- a. 8.35×10^{-21} kg•m/s upward
b. 4.88 kg•m/s to the right
c. 7.50×10^2 kg•m/s to the southwest
d. 1.78×10^{29} kg•m/s forward
- 18 N
- 0.037 m/s to the south
- 3.00 m/s
- a. 0.81 m/s to the east
b. 1.4×10^3 J
- 4.0 m/s
- 42.0 m/s toward second base

- a. 0.0 kg•m/s
b. 1.1 kg•m/s upward
- 23 m/s
- 4.0×10^2 N
- 2.36×10^{-2} m
- 0.413
- 22 cm/s, 22 cm/s
- a. 9.9 m/s downward
b. 1.8×10^3 N upward

CHAPTER 7**Practice A, p. 236**

- 2.5 m/s
- 1.5 m/s^2

Practice B, p. 238

- 29.6 kg
- 40.0 N

Practice C, p. 242

- 0.692 m
- a. 651 N
b. 246 N
c. 38.5 N

Practice D, p. 251

- Earth: 7.69×10^3 m/s,
 5.51×10^3 s; Jupiter:
 4.20×10^4 m/s,
 1.08×10^4 s; moon:
 1.53×10^3 m/s,
 8.63×10^3 s

Practice E, p. 258

- 0.75 N•m
- 133 N

7 Review, pp. 263–267

- 2.7 m/s
- 62 kg
- 1.0×10^{-10} m (0.10 nm)