Answers to assigned even-numbered problems in Chapter 2

2–6: (a) 203 mi; (b) 61 mi/hr.

2–12: (a) $t = 0$ to 17 sec; (b) $t = 28$ sec; (c) $t = 38$ sec;
(d) both directions.

2–14: (a) $x_1 = -1.50$ m, $x_2 = -2.80$ m, $x_3 = -1.90$ m;
(b) $-0.2$ m/s (toward negative $x$);
(c) $v_2 = -0.2$ m/s, $v_3 = +2.0$ m/s.

2–48: 37.1 m

2–50: (a) $h = 20.4$ m; (b) $t = 4.08$ sec.

2–74: (a) negative direction; (b) speeding up;
(c) acceleration is negative; (d) positive direction;
(e) speeding up; (f) acceleration is positive;
(g) object is not moving, so velocity and acceleration are zero.

2–78: (b) $t = 22.9$ sec; (c) $a_p = 2.67$ m/s$^2$;
(d) $v_p = 61.1$ m/s = 220 km/hr.