

**KEY**

(1) 4300

(2) 0.0752

(3) 2.3

(4) 86400

(5)  $m = 4$        $y = 4x$

(6)  $m = 0$        $y = 8$

(7)  $m = -2$        $y = -2x + 28$

(8) (5, 2)

(9) (-4, 5)

(10) -3 or 8

(11)  $-\frac{3}{2}$

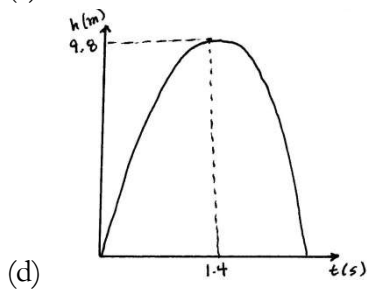
(12) 5 or  $\frac{3}{4}$

(13)  $\frac{-3 \pm \sqrt{23}}{2}$

(14) (a) 1.4 seconds

(b) 9.8 meters

(c) 0.6 seconds and 2.2 seconds



(15)  $A = 6$        $B = 6\sqrt{2}$

(16)  $A = 2\sqrt{3}$        $B = 4\sqrt{3}$

(17)  $A = 9.06$        $B = 4.23$

(18)  $A = 38.66^\circ$        $B = 19.21$

(19)  $t = \frac{d}{v}$

(20)  $g = \frac{4\pi^2 L}{T^2}$  or  $g = L \left( \frac{2\pi}{T} \right)^2$

(21)  $s = \frac{-v \pm \sqrt{v^2 + 2gx}}{g}$