

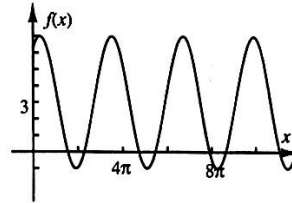
T3. $2.3 \cdot \frac{180^\circ}{\pi} = 131.7802\dots^\circ$ in Quadrant II.

T4. $120^\circ = \frac{2\pi}{3}$

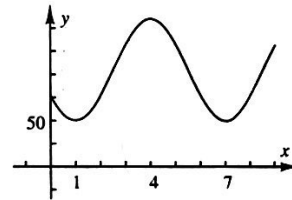
T5. $\frac{\pi}{5} = 36^\circ$

T6. Amplitude = 4
 Period = 10
 Phase displacement = +1
 Sinusoidal axis = +3

T7.



T8.



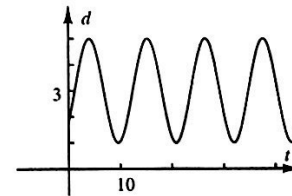
T9. $y = -20 + 30\sin\left(\frac{\pi}{8}(x-3)\right)$

T10. $d = 5$ ft at $t = 4 + 11.2n$ hours

T11. $d = 1$ ft at $t = 9.6 + 11.2n$ hours

T12. $t = 15$ at 3:00 p.m.
 $d(15) = 4.9874\dots$ ft

T13.



T14. $0 \text{ hr} \leq t < 2.7117\dots \text{ hr}$

T15. $t \approx 13.91$ hr

T16. $t = 4 \pm \frac{5.6}{\pi} \left(\cos^{-1} \frac{d-3}{2} + 2\pi n \right)$
 $t = 13.9117\dots$ hr

T17. Answers will vary.

Chapter Test

T1., T2.

