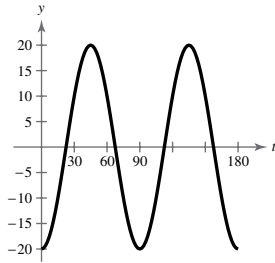


## Trigonometry Answers

1. 18 feet
2.  $\frac{2}{3}$  revolution per minute
3.  $\frac{4\pi}{3}$  radians per minute,  $4^\circ$  per second
4.  $P(t) = -20 \cos(4t)$ ; amplitude: 20, period = 90 sec



5. About 3.5 ft, 10 ft, about 15.3 ft; 25 sec and 60 sec
6. From  $t = 22.5$  seconds to  $t = 67.5$  seconds
7.  $t = 112.5$  sec
8. About 10.1 ft
9.  $\theta = \arctan\left(\frac{x}{25}\right)$ ;  $45^\circ$ , about  $58^\circ$