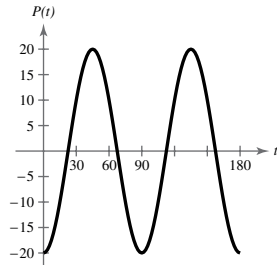


Trigonometric Functions Answers

1. 18 feet
2. $\frac{2}{3}$ revolution per minute
3. $\frac{4\pi}{3}$ radians per minute, 4° 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° , about 58°