

More Trig Applications

For each situation below, a) draw a picture of the situation, b) draw a graph of the situation, c) write an equation for the situation, and d) estimate the height after 3 seconds.

- 1. Joe is spinning a prize wheel that has a radius of 18 inches and whose center is 36 inches off the ground. When Joe spins the wheel it takes 60 seconds for it to make one revolution. Assume the wheel starts spinning even with the middle.**
2. Paul is riding a Ferris Wheel at the park. The wheel has a radius of 30 feet and the bottom of it is 8 feet off the ground. It takes 120 seconds to make one trip around the Ferris Wheel. Assume Paul got on the Ferris Wheel at the bottom.
3. A windmill provides power to a small town in eastern North Carolina. The windmill has a radius of 12 feet and the center is 50 feet off the ground. You watch the windmill spin and time that it takes 45 seconds for it to rotate around once. The windmill starts at the highest point.