1. This graph gives the height of the passenger on a Ferris Wheel as a function of time.

How tall is the post?


What is the radius of the Ferris Wheel?
How fast, in degrees per second, is the wheel turning?
The next four problems ask you to think about how your graph would change if certain details about the Ferris Wheel were changed.
2. Sketch the graph of height of the passenger on a Ferris Wheel as a function of time, if the center post were three feet taller.

3. Sketch the graph of height of the passenger on a Ferris Wheel as a function of time, if the radius were three feet longer.

4. Sketch the graph of height of the passenger on a Ferris Wheel as a function of time, if the angular speed were doubled.

5. Sketch the graph of height of the passenger on a Ferris Wheel as a function of time who is in the car directly behind the passenger we already graphed.

6. Give the first 10 values for $t$ (approximate to the nearest tenth of a second) that correspond to a height of 10 feet.


