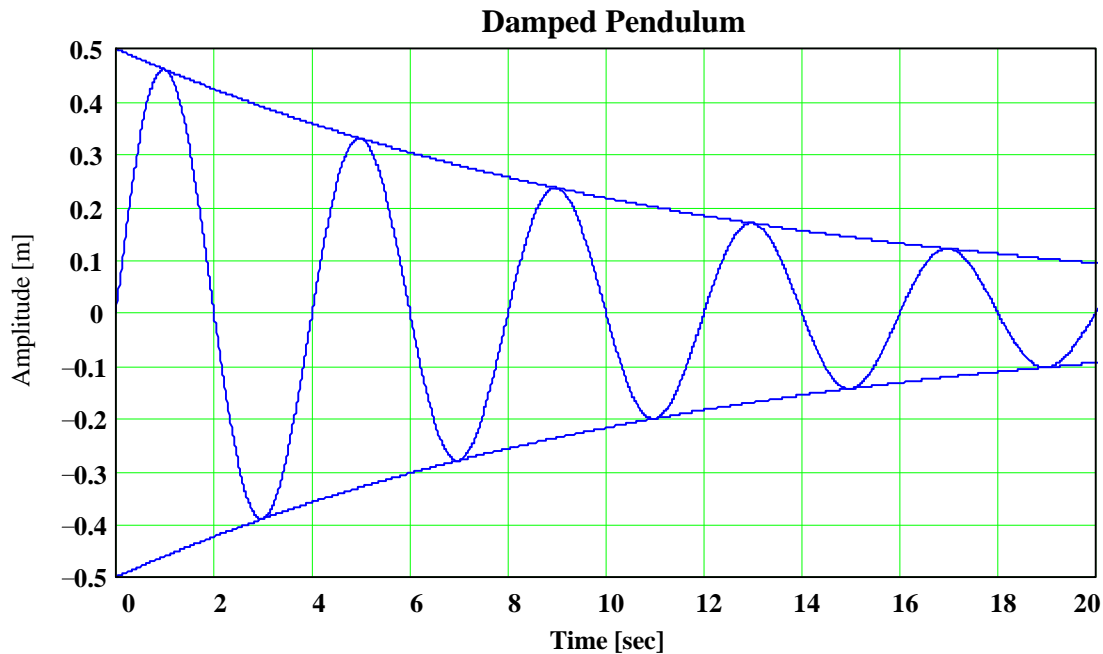


The following graph describes the position of a simple pendulum as a function of time.



1. What is the period of this pendulum ? [3 pts]
2. What is the time constant for this pendulum ? [3 pts]
3. Write the equation that will predict the maximum amplitude of this pendulum as a function of time ? [3 pts]
4. What will be the maximum amplitude of this pendulum after 65 seconds ? [3 pts]
5. How long will it take for the maximum amplitude of this pendulum to be reduced to 3.0 cm ? [3 pts]