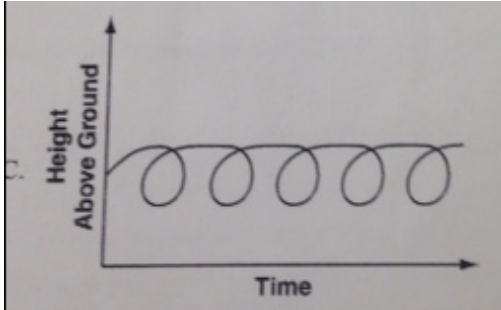
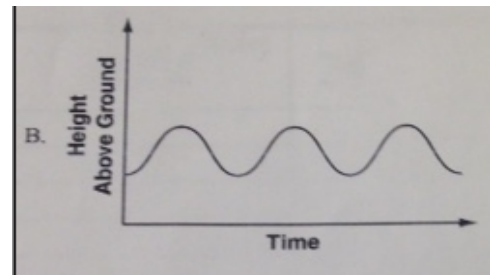
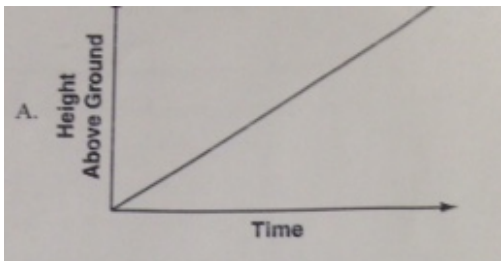


NAME \_\_\_\_\_ DATE \_\_\_\_\_  
ALGEBRA II WARMUP: "THE HIGH ROLLER"

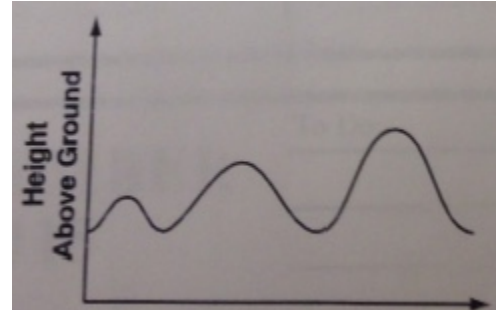
"The High Roller", the largest Ferris wheel ever built, resides in Las Vegas. It stands 550 feet tall and provides passengers a 30-minute ride.



1. If a Ferris wheel made multiple revolutions, which graph would show a passenger's height as a function of time?



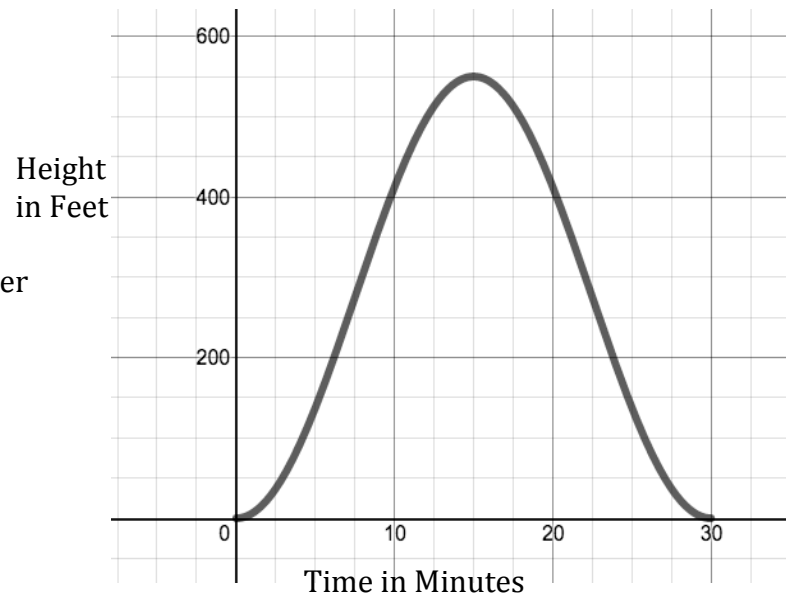
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2. Again, passengers are treated to a 30-minute ride. They get on board at ground level and reach a maximum height of 550 feet. What are the domain and range of the function?

3. The following graph shows the height of a passenger over the time for one revolution.

- a. What is the height of the passenger after 5 minutes?
- b. What is the height of the passenger after 20 minutes?
- c. On what interval(s) is the passenger going upward?



- d. On what interval(s) is the function increasing?
- e. Should the graph of this function be continuous or discrete? Explain.
- f. Is the graph shown discrete or continuous?
- g. What are the zeroes of the function? What does that represent in the context of the situation?