

Solutions

Algebra II Journal

Module 2: Regression

Modeling With Trigonometric Functions

This journal belongs to:

Module 2: Modeling With Trigonometric Functions

Algebra II Journal: Reflection 1

Respond to the following reflection questions and submit to your teacher.

When is a sinusoidal curve the best fit for a data set?

Answer:

A sinusoidal curve typically models periodic data in the shape of a sine wave. One example of sinusoidal data is weather patterns.

Compare the San Diego and Boston curves one more time. Of these two cities, what recommendations would you make to Andrew and Marissa? Which city should their families visit? Which month(s) would you recommend? Why?

Answer:

Answers will vary. Sample responses may include the following big ideas:

- The Boston data is more predictable, as the data points are closer to the curve of best fit.
- Students may prefer Boston in late spring/summer months, as the temperatures reach the 70s and 80s.
- Students may give a wider range of months to visit San Diego, as there is smaller variation in temperatures throughout the year.
- Students may include other factors for recommending one city over another, such as locations of beaches or other tourist attractions, individual preferences in weather, cost of travel, etc.
- Focus on the justification for the response rather than the individual city or month(s) selected. Any solution is correct if a viable justification is provided.