Algebra 1
Data Updates
Chapter 9

Lesson 9.4, page 530, Exercises 53–56, RV Sales
(The new data no longer fits a quadratic model. Therefore, we are supplying similar data for a new topic.)

The number of cassette singles sold in the United States from 1991 to 2000 can be modeled by 
\[ C = 1.5x^2 + 3.9x + 77.6, \]
where \( C \) represents the number of cassette singles sold (in millions) and \( t \) represents the number of years since 1991.

53. Sketch a graph of the model for positive values of \( C \) and \( t \).
54. Use the graph to find a positive root of the equation
\[ 0 = 1.5x^2 + 3.9x + 77.6 \]
55. According to the model, in what year will the number of cassette singles sold in the United States drop to 0?
56. Do you think this prediction is realistic? Explain.

Answers:

53.  

54. 9.1
55. 2000
56. Yes. Sample answer: With the increased production and promotion of Compact Discs (CDs) the demand for cassette singles decreases.
Lesson 9.8, page 558, Exercises 21 and 22, NHL Attendance

Data for recent years do not fit any of the models well.