

## Algebra 2

### Data Updates

#### Chapter 9

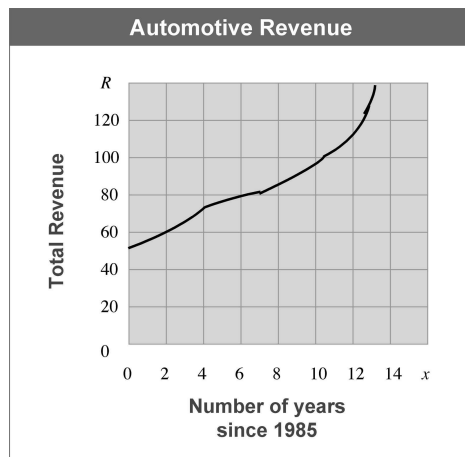
##### Lesson 9.3, page 552, Exercise 42, Automotive Industry

For 1985 to 1998, the total revenue  $R$  (in billions of dollars) from parking and automotive service and repair in the United States can be modeled by

$$R = \frac{-726x^2 + 8166x + 51,755}{0.378x^3 - 14x^2 + 63.3x + 1000}$$

where  $x$  is the number of years since 1985. Graph the model. In what year was the total revenue approximately \$99 billion?

*Answer:* 1995;



##### Lesson 9.6, page 572, Exercise 54, Football Statistics

At the end of the 2000 season, the National Football League's all-time leading passer during regular season play was Steve Young with 2667 completed passes out of 4149 attempts. By the 2000 season, Peyton Manning had moved into the sixth all-time leading passer position with 1014 completed passes out of 1679 attempts. How many consecutive completed passes would Peyton Manning have to make to equal Steve Young's pass completion percentage?

*Answer:* 183