2-3 Interpret Line Graphs - Practice and Problem Solving

SPORTS Refer to Example 2 on page 89.

7. Predict the number of skateboards sold in 2009. Explain your reasoning.

about 325; sales are increasing by about 25 skateboards per year

IRONMAN CHAMPIONSHIP Use the graph at the right.

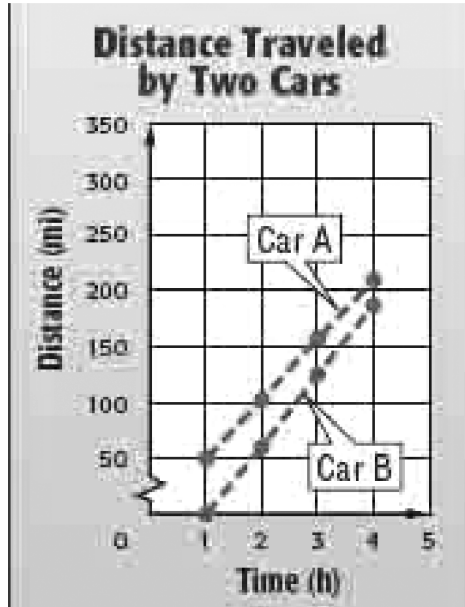**9.** Describe the change in the winning times from 2001 to 2006.

Sample answer: Most years, the winning times decreased. From 2003 to 2004, the winning time increased.

11. Predict when the winning time will be less than 450 minutes.

2016

TRAVEL Use the graph that shows the distance traveled by two cars on the same freeway headed in the same direction.

13. Predict the distance traveled by Car B after 5 hours.

about 250 mi

15. Based on the graph, after how many hours will Car B have traveled about 360 miles?

about 6 hours

BASEBALL Use the table below.

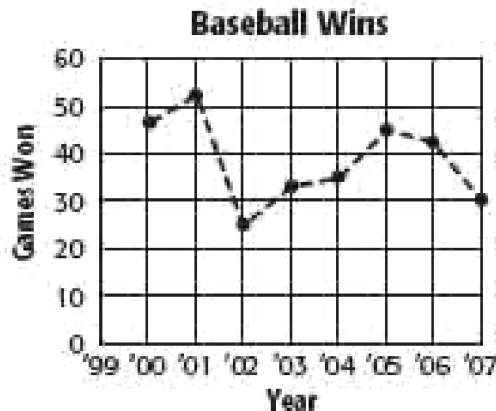| Pine Ridge Panthers Baseball Wins							
Year	2000	2001	2002	2003	2004	2005	2006	2007
Games Won	46	52	25	33	35	45	42	30

17.   Make a line graph of the data.

Step 1   Decide on a scale and interval. The data includes numbers from 25 to 52. So a scale from 0 to 60 and an interval of 10 is reasonable.
Step 2   Label the horizontal and vertical axes.
Step 3   Draw and connect the points for each year. Each point shows the number of games won each year.
Step 4   Label the graph with a title.

19.   Explain the disadvantages of using this line graph to make a prediction about the number of games that the team will win in 2010, 2011, 2012, and 2013.

There are no obvious trends in the graph.

21.   CHALLENGE   Refer to the graph for Exercises 12-16. What can you conclude about the point at which the red and blue lines cross?

Sample answer: The point at which the lines cross represent the time when both cars will have traveled the same distance.

23.   Every Sunday, Kailey saves a portion of her weekly earnings. The table shows the total amount of money she has saved each week. What is the best prediction for the total amount she will have saved after Week 8?
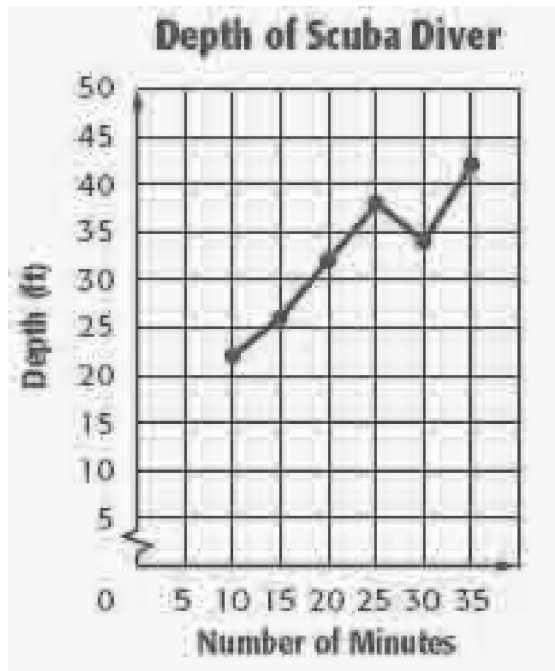
Week	Total Amount Saved ($)
1	15
2	34
3	42
4	60
5	78

A $100
B $130
C $150
D $170

The amount is increasing by approximately $15-$18. The correct answer is B.

25. SCUBA DIVING Make a line graph of the data in the table.

Depth of Scuba Diver below Sea Level	
Minutes	Depth (ft)
10	22
15	26
20	32
25	38
30	34
35	42

Depth of Scuba Diver

PREREQUISITE SKILL Order each set of data from least to greatest.

27. Change in pocket (cents): 50, 45, 75, 55, 25, 60, 40, 80

25, 40, 45, 50, 55, 60, 75, 80