

Lesson 9-2

Reinforce Understanding

Analyze Graphs of Relationships Between Two Variables

I can use a table and a graph to determine and analyze the relationship between two variable quantities.

Worked model

A rental site charges \$7 per movie. Make a table for 1, 2, and 3 movies, then list the points to plot.

1. Independent: number of movies (x). Dependent: total cost (y).
2. Multiply each x by the rate: $1 \rightarrow 7 \cdot 2 \rightarrow 14 \cdot 3 \rightarrow 21$
3. Write each row as an ordered pair (x, y): (1, 7), (2, 14), (3, 21).
4. Plot each pair: move right along the x-axis first, then up to the y value.

Answer: Points to plot: (1, 7), (2, 14), and (3, 21). They rise in a straight path.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Football tickets cost \$45 each. What is the total cost of 3 tickets?

Circle the letter of the best answer. Show how you know.

- A. \$45
- B. \$48
- C. \$90
- D. \$135

Show your work

2. Which ordered pair belongs on the ticket graph for 2 tickets?

Circle the letter of the best answer. Show how you know.

- A. (2, 90)
- B. (2, 45)
- C. (2, 47)
- D. (90, 2)

Show your work

3. On the ticket graph, what should the two axes be labeled?

Circle the letter of the best answer. Show how you know.

- A. Number of tickets and price of one ticket
- B. Number of tickets and total cost
- C. Total cost and \$45
- D. Number of games and number of tickets

Show your work
