# Making Lemonade

Tara and Peter are not sure how many pitchers of lemonade to make. They chose to use a data table to help them decide how many lemons they will need to buy for different numbers of pitchers. Remember, they need juice from 8 lemons for each pitcher they make.

**Lemonade Stand**

| *P*<br>Number of Pitchers | *L*<br>Number of Lemons |
|---|---|
| 1 | |
| 2 | |
| 4 | |
| 8 | |
| | |
| | |

1. **A.** Use the Homemade Lemonade recipe in the *Student Guide* to fill in the missing data.

   **B.** Look at your data table. What patterns do you see?

2. Use the data to make a bar graph on the Lemonade Stand graph.

   **A.** Number the horizontal axis by ones to at least 12. Label this axis Number of Pitchers (*P*).

   **B.** Number the vertical axis by fours to 80. Label this axis Number of Lemons (*L*).

   **C.** Draw bars to show the data in your data table.

   **D.** Look at your graph. What patterns do you see?

**3. A.** How many lemons do Tara and Peter need to make six pitchers of lemonade?

**B.** Show or tell how you decided.

## Making a Point Graph

A bar graph is a good way to make a picture of your data. Scientists and mathematicians also use point graphs to organize data and solve problems.

**4.** You can change your bar graph into a point graph. First make a dot at the top of each bar. Do the dots form a pattern? If so, describe it.

**5.** Use your ruler to draw a line through all the dots. Draw your line to the end of the graph in both directions.

This is part of Tara and Peter's graph. The beginning of your graph should look the same.

**Lemonade Stand**



*L* Number of Lemons

*P* Number of Pitchers
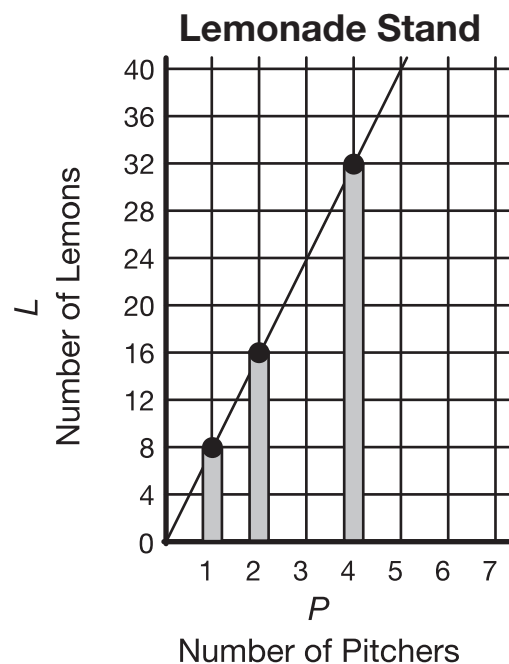
# Explore

**Use your graph to solve Questions 6–10. Draw dashed lines on your graph to show how you found each answer. Then solve each problem another way to check your answer.**

**6. A.** Use your graph to show how many lemons Tara and Peter will need to make five pitchers of lemonade.

  **B.** Show or tell how you checked your answer using another strategy.

**7. A.** How many lemons do they need to make ten pitchers of lemonade?

  **B.** Show or tell how you checked your answer using another strategy.

**8. A.** How many pitchers of lemonade can they make with 72 lemons?

    **B.** Show or tell how you checked your answer using another strategy.

**9. A.** How many pitchers can they make with 56 lemons?

    **B.** Show or tell how you checked your answer using another strategy.

**10. A.** How many pitchers can they make with 44 lemons?

    **B.** Show or tell how you checked your answer using another strategy.

**11.** Tara and Peter went to the store to buy lemons. The lemons were on sale for 4 for $1.00.
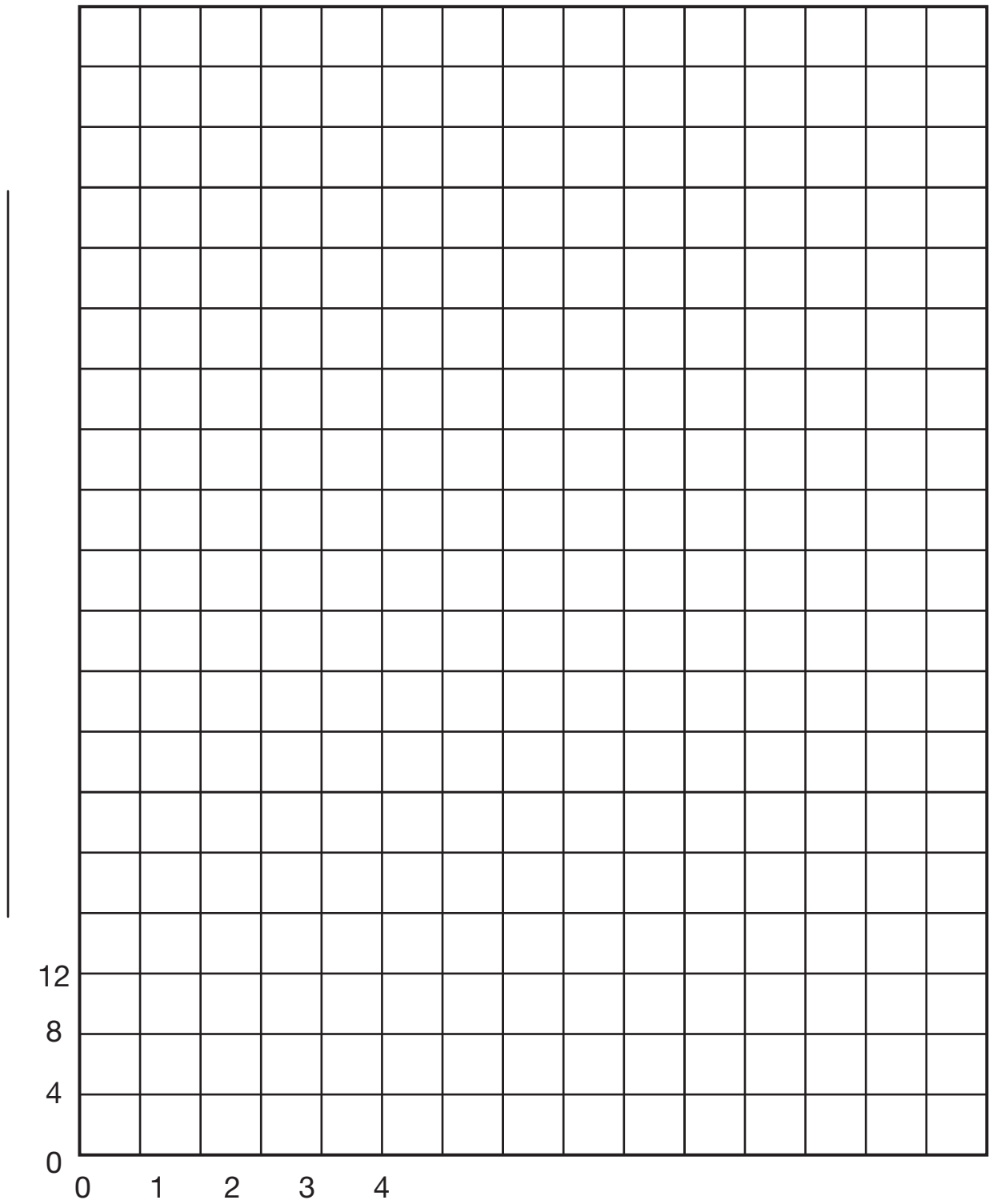
    **A.** Write a number sentence to show how many lemons they can buy for $9.00.



Sale 4 Lemons $1.00

    **B.** If they buy 2 dozen lemons how much will they spend? Show or tell how you know.

Name _____  Date _____

## Lemonade Stand

_____



12
8
4
0

0   1   2   3   4

_____

_____