

LESSON
3-1

Representing Proportional Relationships

Practice and Problem Solving: A/B

Use the table to complete Exercises 1–3.

Feet	1		3	4		6
Inches		24			60	

1. The table shows the relationship between lengths in feet and lengths in inches. Complete the table.

2. Write each pair as a ratio. $\frac{\text{inches}}{\text{feet}} \rightarrow \frac{\quad}{1} = \frac{24}{3} = \frac{\quad}{4} = \frac{60}{\quad} = \frac{\quad}{6}$

Each ratio is equal to _____.

3. Let x represent feet. Let y represent inches.

An equation that describes the relationship is _____.

Use the table to complete Exercises 4 and 5. Tell whether each relationship is proportional. If it is proportional, write an equation that describes the relationship. First define your variables.

Lemonade Recipe

Lemons	1	2	3	4	5	6
Sugar (c)	1.5	3	4.5	6	7.5	9
Water (c)	7	14	21	28	35	42

4. the ratio of lemons to cups of sugar

5. the ratio of cups of sugar to cups of water

Use the table to complete Exercise 6.

Distance Traveled Daily on a Family Road Trip

Hours	6	4.5	9	2	3.25	5.75
Distance (mi)	270	229.5	495	60	188.5	281.75

6. Is the relationship shown in the table below proportional? If so, what is the ratio of the hours driven to miles traveled?
