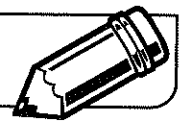
Name Date Time

LESSON 8•3

Addition and Subtraction Patterns



Add.

1. a. $\frac{1}{1} + \frac{1}{2} =$ _____ **b.** $\frac{1}{2} + \frac{1}{3} =$ _____ **c.** $\frac{1}{3} + \frac{1}{4} =$ _____

d. $\frac{1}{4} + \frac{1}{5} =$ _____ **e.** $\frac{1}{5} + \frac{1}{6} =$ _____

2. What pattern do you notice in Problems 1a–1e? _____

_____

_____

3. Use the pattern above to solve these problems.

a. $\frac{1}{6} + \frac{1}{7} =$ _____ **b.** $\frac{1}{10} + \frac{1}{11} =$ _____ **c.** $\frac{1}{99} + \frac{1}{100} =$ _____

4. Do you think this pattern also works for problems like $\frac{1}{8} + \frac{1}{3}$? Explain.

_____

_____

5. The plus signs in Problem 1 have been replaced with minus signs. Find each answer.

a. $\frac{1}{1} - \frac{1}{2} =$ _____ **b.** $\frac{1}{2} - \frac{1}{3} =$ _____ **c.** $\frac{1}{3} - \frac{1}{4} =$ _____

d. $\frac{1}{4} - \frac{1}{5} =$ _____ **e.** $\frac{1}{5} - \frac{1}{6} =$ _____

f. Describe the pattern. _____

_____

_____

Copyright © Wright Group/McGraw-Hill