Activity 1

Select the algebraic pattern that matches the type of number.

1. An even number (n is any integer)
   - **(a)** $2 + n$
   - **(b)** $2 \cdot n$
   - **(c)** $2 - n$

2. An odd number (n is any integer)
   - **(a)** $2 + n \cdot 1$
   - **(b)** $2 + n + 1$
   - **(c)** $2 \cdot n + 1$

3. A prime number (n is any integer)
   - **(a)** divisible only by n and 1
   - **(b)** divisible only by 2
   - **(c)** divisible only by 1, 2, and n

Activity 2

Tell which is the bigger percent increase.

1. **Plant A** was 4 inches tall and grew 1 inch.
   Plant B was 5 inches tall and grew 2 inches.
   Which plant had the bigger percent increase in growth?

2. **City A** normally has 5 clear days in April and had 1 extra clear day this year.
   City B normally has 3 clear days in April and had 3 extra clear days this year.
   Which city had the bigger percent increase in clear days?

3. **Rebecca** was 48 inches tall and grew 1 inch.
   Charlie was 52 inches tall and grew 1 inch.
   Which student had the bigger percent increase in height?

Activity 3

Tell if the problems are proportion problems, unit rate problems, or best deal problems.

1. You are doubling a recipe that calls for 2 cups of water and 1 cup of sugar.

2. You are comparing 3 packs of gum for $4 and 2 packs of gum for $3.

3. Batteries are sold in a 12-pack for $12.99. You want to know how much for just 1 battery.

4. You are mixing green paint using 2 parts blue and 1 part yellow. You need 4 times that amount to finish the room.

5. ABC Grocery sells a dozen donuts for $3.99. You want to know how much 1 donut costs.

Activity 4 • Distributed Practice

Solve.

1. $100.01 - 99.989 = a$

2. $\frac{5}{8} \cdot \frac{4}{10} = b$

3. $12.75 \div 3 = c$

4. $\frac{3}{9} + \frac{4}{6} = d$

5. Write the decimal number 0.001 as a fraction.

6. Write the fraction $\frac{1}{9}$ as a repeating decimal number.

7. Write 40% as a fraction.

8. Write 100% as a decimal number.