Problem-Solving Strategy:
Find a Pattern

Use the pattern below to answer problems 1–3.

\[ 0.02 \quad 0.04 \quad 0.08 \quad 0.14 \quad 0.22 \quad \underline{?} \quad 0.44 \]

1. Describe the pattern and write in the missing number.

________________________________________________________________________

2. Continue the pattern to find the next three numbers.

________________________________________________________________________

3. If the pattern represents the height of a plant in inches over a 7-week period, how tall was the plant the third week? Explain how you found your answer.

________________________________________________________________________

Jerome made a pattern with numbers. He started with the number 0.01. He added 0.5 to get the next number. He subtracted 0.3 to get the next number. Then, he repeated the pattern. Use Jerome’s pattern to answer problems 4–6.

4. Write the first 6 numbers of the pattern.

________________________________________________________________________

5. Make up your own number pattern that involves addition. Explain your pattern and write the first 6 numbers.

________________________________________________________________________

________________________________________________________________________

6. Make up your own number pattern that involves subtraction. Explain your pattern and write the first 6 numbers.

________________________________________________________________________

________________________________________________________________________
Problem-Solving Strategy:
Find a Pattern

Use the pattern below to answer problems 1–3.

| 0.02 | 0.04 | 0.08 | 0.14 | 0.22 | 0.32 | 0.44 |

1. Describe the pattern and write in the missing number.

   Add 0.02 to the first number, 0.04 to the next, 0.06 to the next, etc.

2. Continue the pattern to find the next three numbers.

   0.58, 0.74, 0.92

3. If the pattern represents the height of a plant in inches over a 7-week period, how tall was the plant the third week? Explain how you found your answer.

   0.08 inches; explanations may vary.

Jerome made a pattern with numbers. He started with the number 0.01. He added 0.5 to get the next number. He subtracted 0.3 to get the next number. Then, he repeated the pattern. Use Jerome’s pattern to answer problems 4–6.

4. Write the first 6 numbers of the pattern.

   .51, .21, .71, .41, .91, .61

5. Make up your own number pattern that involves addition. Explain your pattern and write the first 6 numbers.

   Answers may vary.

   Check students’ patterns.

6. Make up your own number pattern that involves subtraction. Explain your pattern and write the first 6 numbers.

   Answers may vary.

   Check students’ patterns.