

Geometric Sequences: Finding explicit and recursive rules starting with  $n = 1$

Identify the common ratio. Write a recursive function and an explicit function for each sequence.

1. 5, 10, 20, 40, 80, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_

2. 1000, 500, 250, 125, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_

3. 4, 12, 36, 108, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_

4. 4, 16, 64, 256, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_

5. 4000, 1000, 250, 62.5, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_

Geometric Sequences: Finding explicit and recursive rules starting with  $n = 0$

Identify the common ratio. Write a recursive function and an explicit function for each sequence.

1. 5, 10, 20, 40, 80, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_

2. 1000, 500, 250, 125, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_

3. 4, 12, 36, 108, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_

4. 4, 16, 64, 256, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_

5. 4000, 1000, 250, 62.5, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_      Common Ratio:  
Recursive Function: \_\_\_\_\_      Explicit Function \_\_\_\_\_