

LESSON **4.2** Assignment

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Name \_\_\_\_\_ Date \_\_\_\_\_

**The Password Is...Operations!**  
**Arithmetic and Geometric Sequences**

Consider the first 2 terms of this sequence.

28, 14, ...

1. Is this sequence arithmetic or geometric? Explain your reasoning.

2. Let's suppose the sequence 28, 14, ... is arithmetic.

a. What is the common difference?

b. List the next 3 terms in the sequence.

c. Explain how you determined your answers in part (b).

d. Is this sequence finite or infinite? Explain your reasoning.

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3. Let's suppose the sequence 28, 14, . . . is geometric.

a. What is the common ratio?

b. List the next 3 terms in the sequence.

c. Explain how you determined your answers in part (b).

d. Is this sequence finite or infinite? Explain your reasoning.



4. Using the terms 28, 14, write the next 3 terms of a sequence that is neither arithmetic nor geometric.