

**LESSON**  
**11-1** **Practice A**  
**Geometric Sequences**

Find the common ratio of each geometric sequence. Then find the next three terms in each geometric sequence.

1. 1, 4, 16, 64, ...  
common ratio: \_\_\_\_\_  
\_\_\_\_\_

2. 10, 100, 1000, 10,000, ...  
common ratio: \_\_\_\_\_  
\_\_\_\_\_

3. 128, 64, 32, 16, ...  
common ratio: \_\_\_\_\_  
\_\_\_\_\_

4. 4, -20, 100, -500, ...  
common ratio: \_\_\_\_\_  
\_\_\_\_\_

5. The first term of a geometric sequence is 2 and the common ratio is 4. Find the 6th term.  
\_\_\_\_\_

6. The first term of a geometric sequence is -3 and the common ratio is 2. Find the 8th term.  
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7. The first term of a geometric sequence is 7 and the common ratio is -2. Find the 9th term.  
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8. What is the 5th term of the geometric sequence 9, 27, 81, 243, ...?  
common ratio ( $r$ ): \_\_\_\_\_  
first term ( $a_1$ ): \_\_\_\_\_  
5th term: \_\_\_\_\_

9. What is the 13th term of the geometric sequence -2, 4, -8, 16, ...?  
common ratio ( $r$ ): \_\_\_\_\_  
first term ( $a_1$ ): \_\_\_\_\_  
13th term: \_\_\_\_\_

10. Martin got a job at a starting pay of \$8.00 per hour. His boss told him that if he works hard he can get a raise each year. The table shows Martin's wage for the first few years. Find Martin's hourly wage after 6 years. Round to the nearest cent.

Year	Hourly Wage (\$)
1	\$8.00
2	\$9.60
3	\$11.52

common ratio ( $r$ ): \_\_\_\_\_  
first term ( $a_1$ ): \_\_\_\_\_  
6th term: \_\_\_\_\_

**LESSON**  
**11-1**

**Practice B**  
**Geometric Sequences**

Find the next three terms in each geometric sequence.

1.  $-5, -10, -20, -40, \dots$

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2.  $7, 56, 448, 3584, \dots$

\_\_\_\_\_

3.  $-10, 40, -160, 640, \dots$

\_\_\_\_\_

4.  $40, 10, \frac{5}{2}, \frac{5}{8}, \dots$

\_\_\_\_\_

5. The first term of a geometric sequence is 6 and the common ratio is  $-8$ . Find the 7th term.

\_\_\_\_\_

6. The first term of a geometric sequence is  $-3$  and the common ratio is  $\frac{1}{2}$ . Find the 6th term.

\_\_\_\_\_

7. The first term of a geometric sequence is  $-0.25$  and the common ratio is  $-3$ . Find the 10th term.

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8. What is the 12th term of the geometric sequence  $-4, -12, -36, \dots$ ?

\_\_\_\_\_

9. What is the 10th term of the geometric sequence  $2, -6, 18, \dots$ ?

\_\_\_\_\_

10. What is the 6th term of the geometric sequence  $50, 10, 2, \dots$ ?

\_\_\_\_\_

11. A shoe store is discounting shoes each month. A pair of shoes cost \$80. The table shows the discount prices for several months. Find the cost of the shoes after 8 months. Round your answer to the nearest cent.

Month	Price
1	\$80.00
2	\$72.00
3	\$64.80

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