

Math Sheet

Name _____ Score _____ Teacher _____ Date _____

Geometric Sequences

Complete all three sections. Sequence indexing starts at 1.

1. Is each list geometric? Give r when it is.

1. 3, -6, 13, -24

Yes / No: _____ d or r: _____

2. 3.7, 22.2, 133.3, 799.2

Yes / No: _____ d or r: _____

3. 4.2, 12.6, 37.8, 113.4

Yes / No: _____ d or r: _____

4. 3, -9, 27, -81

Yes / No: _____ d or r: _____

2. Use the formula. Write the first four terms and the stated term.

5. $a_n = 4 \cdot 6^{n-1}$

First 4: _____

$a_7 =$ _____

6. $a_n = 2.4 \cdot (-4)^{n-1}$

First 4: _____

$a_7 =$ _____

7. $a_n = 2.4 \cdot (-5)^{n-1}$

First 4: _____

$a_5 =$ _____

8. $a_n = 3 \cdot 5^{n-1}$

First 4: _____

$a_6 =$ _____

3. Use the first term and d or r. Write four terms and an explicit formula.

9. $a_1 = 3.5$ $r = -4$

First 4: _____

$a_n =$ _____

10. $a_1 = 4$ $r = 4$

First 4: _____

$a_n =$ _____

11. $a_1 = 4$ $r = 3$

First 4: _____

$a_n =$ _____

12. $a_1 = 1.7$ $r = -6$

First 4: _____

$a_n =$ _____