

NAME

QUARTER 1

GRADE & SECTION

DATE

Activity: Geometric Sequence

- A. Identify the common ratio in each geometric sequence. Choose from the options provided on the right side of the activity.

1. 3, 12, 48, 192

 $r =$

2

 $\frac{1}{2}$

2. 64, 32, 16, 8

 $r =$

-2

 $-\frac{1}{2}$

3. -1, 3, -9, 27

 $r =$

3

 $\frac{1}{4}$

4. $\frac{1}{4}$, $\frac{1}{2}$, 1, 2

 $r =$

-3

4

- B. Find the n th term of the geometric sequence and complete the necessary information..

1. 2, -6, 18, -54, ...

 $g_1 =$

2

 $r =$

-3

 $g_7 =$

$$g_n = g_1 r^{n-1}$$

$$g_7 = (2) (-3)^{7-1} = (2) (-3)^6$$

$$g_7 =$$

2. 512, 128, 32, ...

 $g_1 =$
 $r =$
 $g_5 =$

$$g_n = g_1 r^{n-1}$$

$$g_5 = () ()^{-1} = () ()$$

$$g_5 =$$

3. $g_2 = 5$ and $g_4 = 125$

 $g_1 =$
 $r =$
 $g_5 =$

$$g_n = g_1 r^{n-1}$$

$$g_5 = () ()^{-1} = () ()$$

$$g_5 =$$