

NAME

QUARTER 1

GRADE &amp; SECTION

DATE

## Activity: Geometric Sequence

Complete the information to find what is asked given a geometric sequence. Recall that:

$$a_n = a_1 r^{n-1}$$

- 1) Find  $a_{11}$  of a geometric sequence 3, 6, 12, 24, ...

$$a_1 = \boxed{\phantom{00}} \quad r = \boxed{\phantom{00}} \quad n = \boxed{\phantom{00}} \quad a_{11} = \boxed{?}$$

Final Answer: The 11<sup>th</sup> term is  $\boxed{\phantom{00}}$

- 2) Find 9<sup>th</sup> term of a geometric sequence 4, -12, 36, -108, ...

$$a_1 = \boxed{\phantom{00}} \quad r = \boxed{\phantom{00}} \quad n = \boxed{\phantom{00}} \quad a_9 = \boxed{?}$$

Final Answer: The 9<sup>th</sup> term is  $\boxed{\phantom{00}}$

- 3) In a geometric sequence  $\frac{1}{5}, \frac{1}{10}, \frac{1}{20}, \frac{1}{40}, \dots$ , what is  $a_{10}$ ?

$$a_1 = \boxed{\phantom{00}} \quad r = \boxed{\phantom{00}} \quad n = \boxed{\phantom{00}} \quad a_{10} = \boxed{?}$$

Final Answer: The 10<sup>th</sup> term is  $\boxed{\phantom{00}}$

- 4) What term is 2048 in a geometric sequence 2, 4, 8, 16, ...

$$a_1 = \boxed{\phantom{00}} \quad r = \boxed{\phantom{00}} \quad n = \boxed{?} \quad a_n = \boxed{\phantom{00}}$$

Final Answer: The 2048 is the  $\boxed{\phantom{00}}$ <sup>th</sup> of the sequence.

How many attempts? \_\_\_\_.  
How well did you do?



Need help!



Just OK!



Splendid

I THINK...