

NAME _____

QUARTER 1

GRADE & SECTION _____

DATE _____

Activity: Geometric Means

Find the geometric means of the following sequence.

Recall that: $a_2 = \pm\sqrt{a_1 a_3}$ and $r = \sqrt[n-k]{\frac{a_n}{a_k}}$

- 1) What is the geometric mean between -2 and -72 ? \pm _____
- 2) What is the geometric mean between 1 and $\frac{1}{9}$? \pm _____
- 3) Insert four geometric means between -1 and -243 .

Solution:

$$\text{Take } a_n = -243, \quad n = \boxed{} \quad r = \sqrt[n-k]{\frac{\boxed{}}{\boxed{}}}$$

$$\text{and } a_k = \boxed{}, \quad k = \boxed{} \quad r = \boxed{}$$

Therefore, to complete the sequence:

$$\begin{array}{cccccc} -1 & \boxed{} & \boxed{} & \boxed{} & \boxed{} & -243 \\ \hline a_1 & a_2 & a_3 & a_4 & a_5 & a_6 \end{array}$$

- 4) Find the missing term of the sequence $2, \underline{\quad}, \underline{\quad}, 128$.

Solution:

$$\text{Take } a_n = 128, \quad n = \boxed{} \quad r = \sqrt[n-k]{\frac{\boxed{}}{\boxed{}}}$$

$$\text{and } a_k = \boxed{}, \quad k = \boxed{} \quad r = \boxed{}$$

Therefore, to complete the sequence:

$$\begin{array}{cccc} 2 & \boxed{} & \boxed{} & 128 \\ \hline a_1 & a_2 & a_3 & a_4 \end{array}$$

How many attempts? ____.
How well did you do?



Need help!



Just OK!



Splendid

I HAVE TO REMEMBER THAT...