Dear Parents,

Attached are the notes and homework for the lesson on Wednesday, April 15 and Thursday, April 16. Here is the link for the video of the new lesson:

[https://cobbk12org-my.sharepoint.com/:v:/g/personal/john\_white\_cobbk12\_org/EWSeEcesIS1MiMzR1z2FQFIBXpbY7ghADq1v3USK5QSDTA?e=aHNkgr](https://cobbk12org-my.sharepoint.com/%3Av%3A/g/personal/john_white_cobbk12_org/EWSeEcesIS1MiMzR1z2FQFIBXpbY7ghADq1v3USK5QSDTA?e=aHNkgr)

The following concept was covered today: Geometric Sequences:

* The second type of explicit sequence is ***geometric sequences*** which is a sequence in which the pattern of the sequence is being multiplied. The formula is as follows:

 To find the ***common ratio*** calculate the following: ***second term divided by the first term***.

***Steps to writing a rule for the nth term of the geometric sequence and finding a specific term:***

In this formula, remember ***r***represents the common ratio and can be found by the following:  ***second term divided by the first term.***This will be plugged in for ***r.***The first number in the list will be plugged in for  To find a specific term, just plug in the number of the term that is being asked for the ***n***. For example, to find the 20th then plug in 20 for n. Last, enter this information in the calculator to get the final answer.

***Example 1***: 4, 12, 36, 108, …

Find the common ratio which is  =  =  =  = 3 = r

 = 4

 = 4:



To find the fifth term, plug in 5 for n: So,  so  = 324

***Recursive Rule:*** ***= 4***

***= r******so******=***

***Example 2***: 2, - 4, 8, - 16 …

Find the common ratio which is  =  =  =  = - 2 = r

 = 2

 = 2:



To find the sixth term, plug in 6 for n: So,  so  = - 64

***Recursive Rule:*** ***= 2***

***= r******so******=***

Please do not hesitate to email us with questions or concerns.

Have a blessed evening!

Thanks,

Mrs. Crawford

Sprayberry High School

Special Education Teacher