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>

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:

C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\8CE56D7E.tmp 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 C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\BC77F63C.tmp 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 C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\C8E883AA.tmp = C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\44196948.tmp = C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\9675C696.tmp = C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\92076714.tmp = 3 = r

C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\6867A242.tmp = 4

C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\97433BA0.tmp = 4:

C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\6FE942AE.tmp

To find the fifth term, plug in 5 for n: So, C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\ED1CF2EC.tmp so C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\472293DA.tmp = 324

***Recursive Rule:*** C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\50BF58F8.tmp***= 4***

C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\D0A441C6.tmp***= r***C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\F17BF9C4.tmp***so***C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\3793B872.tmp***=***C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\5DD72150.tmp

***Example 2***: 2, - 4, 8, - 16 …

Find the common ratio which is C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\BC9723DE.tmp = C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\9B53DB9C.tmp = C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\BB81700A.tmp = C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\B4FFF4A8.tmp = - 2 = r

C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\15BE48F6.tmp = 2

C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\CCBFF874.tmp = 2:

C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\ED7E1AA2.tmp

To find the sixth term, plug in 6 for n: So, C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7B5B3300.tmp so C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\5DA2110E.tmp = - 64

***Recursive Rule:*** C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\B47B04C.tmp***= 2***

C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\9A68183A.tmp***= r***C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\DA363C58.tmp***so***C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\A6D6DC26.tmp***=***C:\Users\KDC10960\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\ED5E6324.tmp

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

Have a blessed evening!

Thanks,

Mrs. Crawford

Sprayberry High School

Special Education Teacher