

Precalculus Summer Assignment

Your summer assignment for precalculus this year consists of three parts, dealing primarily with finding patterns. Nearly all of precalculus and math itself is recognizing patterns and using those patterns to predict outcomes in new situations. Because of the importance of patterns, we will be practicing finding patterns this summer to prepare you for our year together. Make sure to join our Precalculus Google Classroom. The code is: **lypm57q**

Part 1: Finding patterns in the world around you.

For this assignment, you will need to take 4 pictures of different patterns that you see around you. One of the pictures may be a pattern you find in your house or other architecture, but the other 3 pictures must be naturally occurring...not man-made. These last 3 pictures must be taken outside. All 4 pictures must be taken by you and uploaded into the [Google Slides presentation](#) linked in our Google Classroom. On each slide, you will need to include the picture, the date you took the picture, its location and a title that you give to the picture. The more creative, the better!

Part 2: Finding patterns in Scripture.

This part of the assignment asks you to find one [passage of scripture](#) that deals with patterns and/or numbers. Write 3 questions about that passage. They may be “mathy” questions (that you might find on a math test), and at least one question that you have about the spiritual significance of that passage. (The question cannot be, “What is the spiritual significance of this passage?” in case you were wondering!) After those questions include your thoughts on the passage and possibly answers to the questions. It's ok if you don't know all the answers to the questions--that's why we ask them!

Part 3: Finding patterns in the arithmetic mistakes we make.

In this part of the assignment, we'll be looking at mistakes we commonly make and work to understand the concepts well enough so that we can prevent ourselves from repeating those mistakes. Our primary focus will be simplifying fractions. This section includes [notes](#) with a [video](#), and [homework](#), with an [answer key](#).

EVERY TIME YOU DO THIS:



$$f(x) = \frac{\cancel{x^2} + 2x + 1}{\cancel{x^2} + 3} = \frac{2x+1}{3}$$

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