**Episode 12: How to Do Math**

Questions and Exercises

1. This video uses one word to explain what to look for when doing math. What is that word, and why do you think we chose it? How might this approach to math be different from what you are doing now?

2. Next time you are in your math class, try taking notes not just on what you see, but on how the instructor thinks through the *process* of solving the problem.

3. Try reading your math textbook for understanding, with paper and a pencil nearby to work through the examples.

* You could try using the [Frayer Model](https://www.understood.org/~/media/ca57444dfc8649f8b235769d2f0ae102.pdf) to enhance your understanding of each new concept.

4. When you are working your math problems, what kinds of questions can you ask yourself to talk through them, “translate” them, break them down, and work through them step-by-step?

* You might try out [George Polya’s Problem Solving Techniques](https://math.berkeley.edu/~gmelvin/polya.pdf).

5. Instead of working the same type of math problem over and over in a row, try mixing them up. Read more about why [here](https://blogs.iu.edu/universitydivision/2017/11/09/finals/) (look under “Mistake 2. Repetition”).

6. How could you adapt some of these strategies for other kinds of STEM courses?