

How to Excel in Mathematics at Michigan?

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PI Mathematics Coach

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How to excel in Math?

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Most Importantly:

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YOU should WANT to excel in Math and YOU should know that you CAN excel in Math

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How is Michigan Math different?

Two Types of Math problems

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- Plug-and-Chug

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- Plug-and-Chug
- Modeling which usually comes with a verbal description (important for Business majors and professionals)

Plug-and-Chug vs. Modeling: Examples

Example:

- Use the table below to answer the following question:

x	0	1	2	3
$f(x)$	5	4	9	-4

What is the average rate of change of the function f for $1 \leq x \leq 3$?

Plug-and-Chug vs. Modeling: Examples

Example:

[16 points] Marisa is planning to open a lemonade stand, and she needs to buy equipment and ingredients to make the lemonade. If she decides to make a total of 12 gallons of lemonade, the equipment and ingredients will cost her a total of 57 dollars. However, if she decides to make 20 gallons, it will cost her 85 dollars.

- a. [5 points] Let $C(g)$ be the cost to Marisa, in dollars, of producing g gallons of lemonade. Assuming $C(g)$ is a linear function, find a formula for $C(g)$.

- b. [3 points] Find and give a practical interpretation, in the context of this problem, of the slope of the function $C(g)$. *Include units.*

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 - Be organized, both in thinking and in writing. Do the problem step-by-step.

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- Before working on problems "study". Avoid "trial and error" approach (e.g. when you do Web Homework problems).

Most Precious Thing In Your Life

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Steve Jobs: "My favorite things in life don't cost any money. It's really clear that the most precious resource we have is TIME."

Questions?