

### Today's Agenda:

- New Notation for Functions (mini lesson)  
\*Please have your notebook out ready to take notes!
- Go Over Quiz Bonus Problems
- TenMarks!
- Review Your Quiz!

Happy Friday!!!

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### Function Notation:

function of  $x$   
 $f(x)$  means...  
 "f of x" the output of the function when "x" is the input.

Example:

$$f(x) = x^2 - 1$$

What if  $x=4$ ?  
 Replace EVERY "x" with "4"  
 $f(4) = (4)^2 - 1$  Evaluate  
 $f(4) = 15$

When 4 is the input,  
 15 is the output.

\*What is the difference between  $f(3)$  and  $f(x) = x + 3$ ?

They are the same function  
 b/c  $y = f(x)$  both represent outputs.

Remember  
 Range:  
 y-values/

Just the notation is different.

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$$y = \frac{3}{x-2}$$

or  $f(x) = \frac{3}{x-2}$

Domain:  $x-2 \neq 0$   $(-\infty, 2) \cup (2, \infty)$   
 $x \neq 2$

★ What if  
 $f(x) = \sqrt{x+5}$

Domain:  $x+5 \geq 0$   
 $x \geq -5$   $[-5, \infty)$

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### TenMarks:

- Login Info (take a picture of your card just incase)
- 2 Assignments: 20 total problems  
 This time around,  
 12 problems correct = 100% (any more than 12 correct is extra credit!)
- Weight: 5 points towards homework (not recorded on HW log)
- Use as many hints/tips/videos as you wish! : )

Due Monday

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### Make the Most of Your Quiz!

In a different color pen/pencil OR on a separate sheet of paper, be sure to do the following. This will help consolidate your learning and help you to prepare for future assessments.

- If you had a problem correct, explain your thought process and why your answer was correct. This way, when going back to study, you will remember what you did.

\*You can also challenge yourself by creating and solving problems that address similar concepts!

- If you had a problem incorrect:
  - Identify and explain your mistake.
  - Ask me questions if you do not understand your mistake.
  - Retry the problem and/or complete additional practice problems

iXL.com is a great resource for practice, and for extra credit! : )

iXL.com

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