

Math 242

Q's

<http://chaos.math.wichita.edu/>

$$\text{Math(s)} = \boxed{\text{toys}} + \boxed{\text{rules}}$$

Arithmetic: $\cdot, \dots, \ddots, \ddots, \ddots, \dots$

$\{1, 2, 3, 4, 5, \dots\}$

Algebra:

toys \rightarrow Real Numbers

$\frac{9}{6} \neq 0, 1, 2, 2, 2, 2, 2, 2, 2, \dots$

Variable

$$x = 7$$

$$x^2 = 9$$

trig, geometry ?

Polya's method of problem solving?

- (1) understand
- (2) make a plan
- (3) do it
- (4) check

$$x^3 - 2x^2 = 3(x-4)$$

Solve

Missy is part zero; "what is your toolbox?"

Textbook?

Don't Read Math books ...

Do Math Books!

Calculus = toys? + rules?

Input \rightarrow $\left[\begin{array}{c} ? \\ \circ \end{array} \right] \rightarrow$ Output (determined by input plus some 'rule')

Input, output relationship.

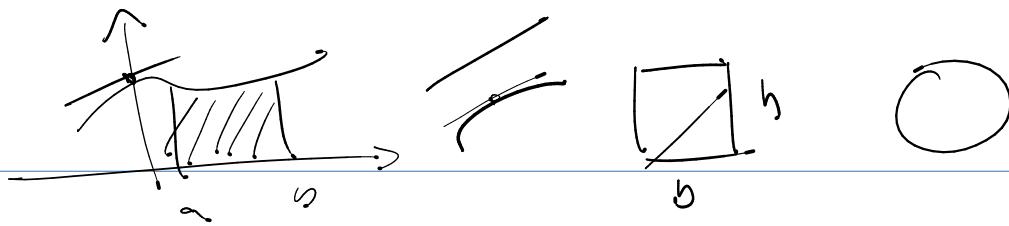
add some restrictions ...

Input set (Domain)

Output set (Codomain)

- ① everything in the domain has one pair in the codomain
- ② NO element in domain gets more than one element in codomain.

\rightarrow call this relationship a Function



see video!

