

# Do Now - Functions

June 27, 2014

- You put a pizza in the oven. After 45 minutes, you take it out. Let  $f(t)$  be the temperature of the pizza  $t$  minutes after you placed it in the oven.

## Meaning of statements:

•  $\rightarrow a. f(0) = 375$

You preheat the oven at  $375^\circ$

$\rightarrow b. f(5) < f(10)$

If the pizza was in the oven for 5 min, the temp. would be less than at 10 min.

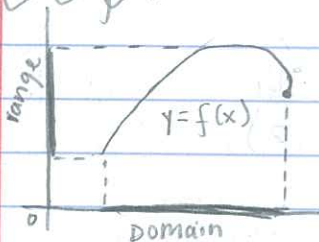
$\rightarrow c. f(40) = f(45)$

Having the pizzas in the oven 45 min, temp be =.

$\rightarrow d. f(45) > f(60)$

Having the pizza in the oven for 45 min. will be greater than having it at 60 min.

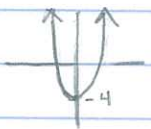
## Range



- Domain:  $(-4, 2)$  Range:  $(1, 4)$
  - Domain:  $(-3, 6]$  Range:  $(-4, 4]$
- # is included  $\rightarrow [$        $( <$  # not included

## Practice

$\rightarrow f(x) = x^2 - 4$



$D = (-\infty, \infty)$

$R = [-4, \infty)$

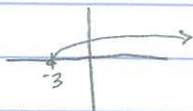
$\rightarrow f(x) = x^3 + 2x + 1$   
 $\{x \mid x \in \mathbb{R}\}$



$D = (-\infty, \infty)$

$R = [-\infty, \infty)$

$\rightarrow f(x) = \sqrt{x+3}$



$D = [-3, \infty)$

$R = [0, \infty)$

$\rightarrow f(x) = 3x$



$D = (-\infty, \infty)$

$R = (-\infty, \infty)$