

October 17, 2017  
 \* Quiz #5 - Tomorrow  
 • Linear Equations & Slope  
 (All Three Handouts)

Oct 17-8:58 AM

5.1 CORE Junctions

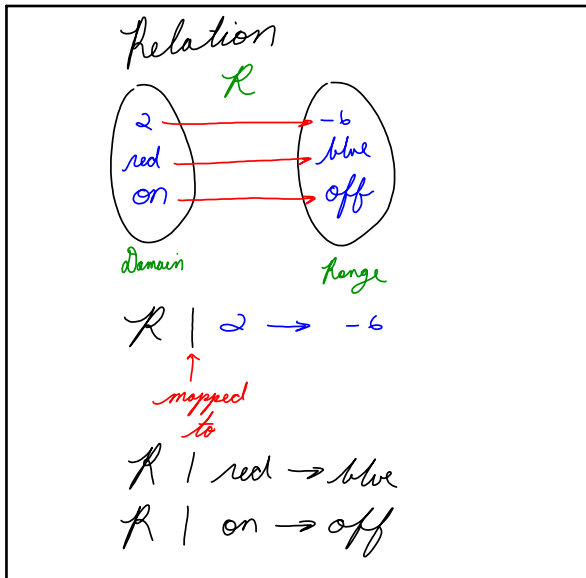
① Relation: a set of ordered Pairs.

$$R = \{(2, -6), (\text{red}, \text{blue}), (\text{on}, \text{off})\}$$

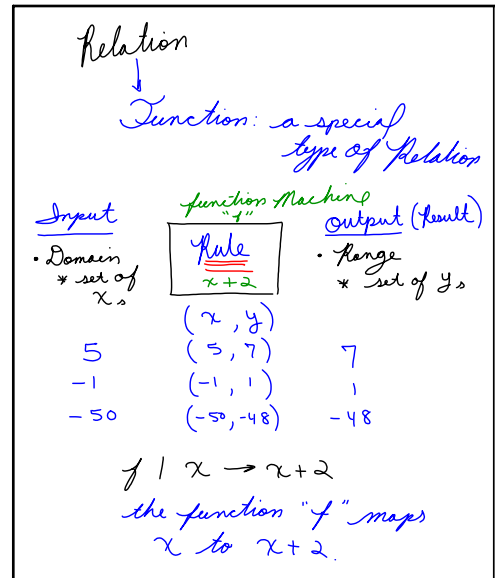
\* \* Domain: the set of first Elements of the ordered Pairs.  
 $D: \{2, \text{red}, \text{on}\}$

\* Range: the set of second elements of the ordered Pairs.  
 Range:  $\{-6, \text{blue}, \text{off}\}$

Oct 17-9:00 AM



Oct 17-9:08 AM



Oct 17-9:14 AM

$g \mid x \rightarrow x^2 - 5$

\* The function "g" maps  $x$  to  $x^2 - 5$ .

Inputs

2	$x^2 - 5$	-1
3		4

\* All valid "Inputs" is the Domain of "g".

Oct 17-9:24 AM

$h \mid t \rightarrow \frac{1}{t}$

\* What is the Domain of  $h$ ?

Input

$\frac{3}{2}$	$\frac{1}{t}$	$\frac{2}{3}$
0		undefined
$\pi$	$(\frac{1}{\pi}, \frac{1}{\pi})$	$\frac{1}{\pi}$
-6	$(-\frac{1}{6}, -\frac{1}{6})$	$-\frac{1}{6}$
"	$(1, \frac{1}{1})$	$\frac{1}{1}$

• Domain: All Real numbers except 0.  
 or  $\{t \mid t \in \mathbb{R} \ \& \ t \neq 0\}$   
 t such that t is a real number and t can not equal zero.

•  $(-\infty, 0) \cup (0, \infty)$   
 (Interval Notation)  
 valid valid  
 $(-\infty, 0) \cup (0, \infty)$

Oct 17-9:33 AM