

January 16, 2015
 * Math Jam starts today.
 12:00 - 2:00

Jan 16-10:01 AM

Real
 Rational Irrational
 whole 0.
 all Rational less than 6
 $a = \{x \in \mathbb{Q} \mid x < 6\}$
 $\mathbb{Q} = \{x \mid x < 6\}$
 $a \cup \mathbb{Q} \rightarrow a \text{ is a subset of } \mathbb{Q}$

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"and" | "or"

$p = \{2, 4, 6\}$ $q = \{3, 4, 5\}$

the Intersection of p and q
 4 is in p and 4 is in q!
 $p \cap q = \{4\}$

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"or"

$p = \{2, 4, 6\}$
 $q = \{3, 4, 5\}$

$p \cup q = \{2, 3, 4, 5, 6\}$
 "or" -> Union

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"and" Intersection $\rightarrow \cap$

$p \cap q$	p	q	$p \cap q$
	T	T	* T
	T	F	F
	F	T	F
	F	F	F

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"or" -> Union $\rightarrow \cup$

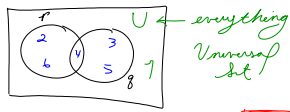
$p \cup q$	p	q	$p \cup q$
	T	T	T
	T	F	T
	F	T	T
	F	F	F

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$$f = \{2, 4, 6\}$$

$$g = \{3, 4, 5\}$$

What set is 7 in?



Empty Set: $\{\}$ → \emptyset

(Null Set)

least all natural number less than 1.

$$a = \emptyset$$

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