

January 20, 2015

Quiz #1 4 pts

#2 → -4

+2

-2

20 pts

3 missed

$20 - 3 = \frac{17}{20} = 85$

Jan 20-9:52 AM

#1)

	\mathbb{N}	\mathbb{W}	\mathbb{Z}	\mathbb{Q}	\mathbb{Q}'	\mathbb{R}
16	✓	✓	✓	✓		✓
$\sqrt{5}$					✓	✓
$\frac{2}{7}$				✓		✓
$0.\overline{45}$				✓		✓
0		✓	✓	✓		✓

Jan 20-10:03 AM

$\sqrt{5}$

\mathbb{Q} \mathbb{Q}' \mathbb{R}

$\mathbb{Q} \rightarrow$ Rationals

Integers	Non-Integer
$-\frac{45}{1}$	$\frac{1}{2} = 0.5$
$\frac{4}{1} = 4.0$	$\frac{1}{3} = 0.\overline{33}$
$\frac{0}{1} = 0$	$\frac{2}{5} = 1.4$
* $\frac{1}{0} \rightarrow$ undefined	

$\frac{7}{5} = 5 \overline{) 1.4}$
 $\frac{7}{5} = 1.4$

Jan 20-10:07 AM

$a = \{ x \in \mathbb{Q} \mid x < 6 \}$

↑
Set of Rational Numbers

$\mathbb{R} \rightarrow$ Reals

Jan 20-10:16 AM

"and" \cap

$a \cap b = \{ x \mid x \in a \text{ and } x \in b \}$

"or" \cup

$a \cup b = \{ x \mid x \in a \text{ or } x \in b \}$

Jan 20-10:18 AM

① $x > -8$ $\xrightarrow{+}$ $\begin{matrix} \circ \\ -8 \end{matrix}$ $(-8, \infty)$

② $x < 5$ $\xrightarrow{-}$ $\begin{matrix} \circ \\ 5 \end{matrix}$

What is the Intersection? $(-\infty, 5)$

$S = \{ x \mid x > -8 \text{ and } x < 5 \}$

$S = \{ -8, \dots, 5 \}$

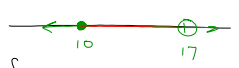
$(-8, 5)$

$-8 < x < 5$

↓
 $x > -8 \text{ and } x < 5$

Jan 20-10:23 AM

① $x \geq 10$
 ② $x < 17$ } "and"

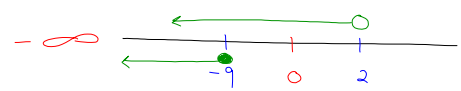
a.) Graph 

b.) S. B. $\{x \mid x \geq 10 \ \& \ x < 17\}$

c.) Interval $[10, 17)$

Jan 20-10:32 AM

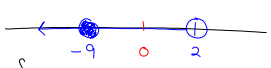
① $x < 2$
 ② $x \leq -9$ } "or" union



S. B.: $\{x \mid x < 2 \ \text{or} \ x \leq -9\}$
 $(-\infty, 2)$

Jan 20-10:44 AM

① $x < 2$
 ② $x \leq -9$ } "and"

a.) Graph 

b.) S. B. $\{x \mid x < 2 \ \& \ x \leq -9\}$

c.) Interval $[-9]$

Jan 20-10:39 AM

* Do 1.3 assignment

Jan 20-10:48 AM