

February 20, 2015

Exam #1 - Monday

- 10 Questions
- Can only use a "Simple" Calculator
- Be on-time!

Feb 20-10:54 AM

$9x - 8y = -21$ Given

$-8y = -9x - 21$

$y = \frac{9}{8}x + \frac{21}{8}$

* Parallel: (3, 4) $y = \frac{9}{8}x + \frac{21}{8}$

$m = \frac{9}{8}$

$y - 4 = \frac{9}{8}(x - 3)$

$8y - 32 = 9(x - 3)$

$8y - 32 = 9x - 27$

$-9x + 8y = 5$

$9x - 8y = -5$

* Perp: (3, 4)

$m = -\frac{8}{9}$

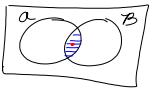
$(y - 4 = -\frac{8}{9}(x - 3))$

$9y - 36 = -8x + 24$

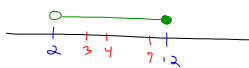
$8x + 9y = 60$

Feb 20-11:13 AM

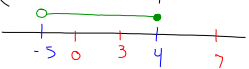
① and \rightarrow Intersection $\rightarrow \cap$



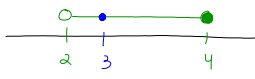
$A = \{x \in \mathbb{N} \mid 2 < x \leq 12\}$



$B = \{x \in \mathbb{Z} \mid -5 < x \leq 4\}$



$A \cap B = \{x \in \mathbb{N} \mid 3 \leq x \leq 4\}$

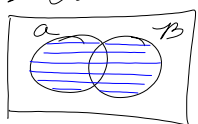


$[3, 4]$

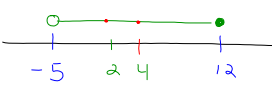
$(2, 4]$

Feb 20-11:33 AM

or \rightarrow Union $\rightarrow \cup$



$A \cup B = \{x \in \mathbb{Z} \mid -5 < x \leq 12\}$



$(-5, 12]$

Feb 20-11:41 AM