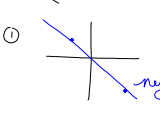


February 20, 2015
Exam #1 - Monday

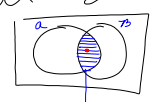
- 10 Questions
- Can only use a "Simple" Calculator

Feb 20-9:51 AM

$(9, -7) \neq (-3, 5) (0, 2)$
 ①  ② $m = \frac{(5) - (-7)}{(-3) - (9)}$
 ③ $-7 = -1 \cdot a + b$ $= \frac{5+7}{-3+(9)} = \frac{12}{-12} = -1$
 $-7 = -9 + b$
 $-7 + 9 = b$ $b = 2$ ④ $y = -x + 2$
 $x + y = 2$ ✓
 ⑤ $5 = -1(-3) + 2$
 $= 3 + 2$
 $5 = 5$ ✓

Feb 20-10:07 AM

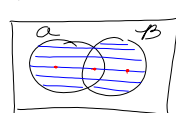
and \rightarrow Intersection $\rightarrow \cap$



$A = \{x \in \mathbb{N} \mid 2 < x \leq 12\}$
 $B = \{x \in \mathbb{Z} \mid -5 < x \leq 4\}$
 $A \cap B = \{x \in \mathbb{N} \mid 3 \leq x \leq 4\}$
 $[3, 4]$
 $(2, 4]$

Feb 20-10:16 AM

or \rightarrow Union $\rightarrow \cup$



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

Feb 20-10:24 AM

$11x - 3y = -23$
x-Int.
 $11x - 3(0) = -23$
 $11x = -23$
 $x = -\frac{23}{11}$ a line
 $(-\frac{23}{11}, 0)$
y-Int.
 $11(0) - 3y = -23$
 $y = \frac{23}{3}$ a line
 $(0, \frac{23}{3})$

Feb 20-10:28 AM

$11x - 3y = -23$ Given
 $\rightarrow y = -11x - 23$
 $y = \frac{11x}{3} - \frac{23}{3}$
 $y = \frac{11}{3}x + \frac{23}{3}$
 $y - y_1 = -m(x - x_1)$
 * Parallel: $(3, 4)$
 $m = \frac{11}{3}$
 * Perpendicular: $(3, 4)$
 $m = -\frac{3}{11}$

Feb 20-10:43 AM

$$D = \{(-2, 6), (0, 8), (-4, 4)\}$$

Relation? or Function?

$$D(x) = \boxed{x + 8}$$

if yes, then what is the rule?

$$D \mid x \rightarrow \boxed{x + 8}$$

$$\text{Domain: } \{-2, 0, -4\}$$

$$\text{Range: } \{6, 8, 4\}$$

Feb 20-10:32 AM