

January 30, 2015

$$A = \{x \in \mathbb{N} \mid 3 \leq x < 7\}$$

$$B = \{x \in \mathbb{Z} \mid -3 < x \leq 4\}$$

① $A \cup B$
 s.p.: $\{x \in \mathbb{Z} \mid -3 < x < 7\}$
 $(-3, 7)$

② $A \cap B$
 s.p.: $\{x \in \mathbb{N} \mid 3 \leq x \leq 4\}$
 $[3, 4]$

③ c.) yes $y \mid x \rightarrow 2x$

Jan 30-9:53 AM

$$g \mid x \rightarrow 3x + 4$$

$$h \mid 3a - 5 \rightarrow 3(3a - 5) + 4$$

$$9a - 15 + 4$$

$$9a - 11$$

output

Jan 30-10:25 AM

| | |
|-----|-----|
| x | y |
| 2 | 4 |
| 5 | 3 |
| 8 | |

Jan 30-10:26 AM

Slope \rightarrow the rate of change anywhere on the line.

Jan 30-10:28 AM

Slope $\frac{y}{f(x)}$

$$y_2 - y_1 = \Delta y$$

$$x_2 - x_1 = \text{Change in } x$$

Slope: $\frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1} = \text{Horizontal Change}$

- always a fraction
- $0 \leq \text{slope} \leq 1$
- Δx means change

Jan 30-10:30 AM

Jan 30-10:35 AM