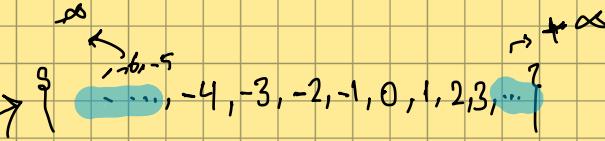


→ set

→ elements



$$A = \{1, 2, 3\}$$

→ infinite

finite

→ equal sets

$$B = \{3, 2, 1\}$$

$$A = B$$

$$C = \{\text{red, blue, green}\}$$

$$K = \{T, F\}$$

$$\rightarrow N_{\text{natural}} = \{1, 2, 3, \dots\}$$

$$Z_{\text{integers}} = \{\dots, -3, -2, -1, 0, 1, 2, 3, \dots\}$$

$$R_{\text{real numbers}} = \{\dots, \underline{-1}, \underline{2}, \underline{-1}, \underline{-0.9}, \underline{0}, \underline{0.1}, \underline{2}, 2, 3, \dots\}$$

$$\rightarrow \in A = \{1, 2, 3\}$$

$$1 \in A$$

$$5 \notin A$$

$$\rightarrow P = \{\underbrace{\{1, 2\}}, \underbrace{3}, \underbrace{\{4, 5\}}\}$$

→ size, cardinality of sets

→ P has 3 elements.

$$\rightarrow |P| = 3$$

$$\rightarrow F = \{\}$$

$$|F| = 0 \quad \text{empty set}$$

\emptyset