

Math 172: Section X02

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9:29 AM

Section 1.1: Sets

set \equiv a collection of objects

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

↑
the set A

↑ ↑
note: type of bracket is important

$$B = \{ 2, 4, 6, \dots \} \quad \leftarrow \text{infinite set}$$

$$C = \{ 2, 4, 6, \dots, 100 \} \quad \leftarrow \text{finite set}$$

named set:

$$N \equiv \{ 1, 2, 3, \dots \}$$

↑
the set of natural numbers (aka counting numbers)

set-builder notation: "such that"

$$B = \{ x \mid x \text{ is an even natural number} \}$$

↑

the set
of all
 x