

A **set** is a collection of distinct objects.

$$\text{set } A = \{2, 4, 6, 8\}$$

$$\text{set } B = \{3, 6, 9, 12, 15\}$$

$$\text{set } C = \{7, 9, 11\}$$

The “distinct objects” of a set are called **elements**.

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$$\text{set } A \cap \text{set } B$$

$$\text{set } B \cap \text{set } C$$

$$\text{set } A \cap \text{set } C$$

If a **set** has no elements, it is called the **empty set** and denoted as $\emptyset$.

The **Intersection** of two **sets** is the set containing the common elements of the two **sets** and is denoted by a “ $\cap$ ” sign.

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$$\text{set } A \cup \text{set } B$$

$$\text{set } B \cup \text{set } C$$

$$\text{set } A \cup \text{set } C$$

The **Union** of two **sets** is the **set** containing the elements that are in either **set** or both **sets** and is denoted by a “**U**” sign.

A **set** is a collection of distinct objects.

$$\text{set } A = \{a, b, c\}$$

$$\text{set } B = \{a, b\}$$

$$\text{set } C = \{a, b, c\}$$

Two **sets** are equal if they have all the same elements.

A **set** is a collection of distinct objects.

$$\text{set } A = \{a, b, c\}$$

$$\text{set } B = \{a, b\}$$

$$\text{set } C = \{a, b, c\}$$

Set B is a proper subset of **Set A** if every element in **B** is also and element of **A** and $B \neq A$.

Set C is a subset of **Set A** if every element in **C** is also and element of **A**.

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$$\text{set } A = \{a, b, c\}$$

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Find all the subsets of **set A**

0 elements

1 element

2 elements

3 elements

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Set C is a subset of **Set A** if every element in **C** is also and element of **A**.