

**EduSahara™ Learning Center Assignment****Grade : Class VIII, ICSE****Chapter : Sets****Name : Subsets****Licensed To : Teachers and Students for non-commercial use**

---

1. Which of the following is a subset of  $A = \{2,4,0\}$  ?

- (i)  $\{1,5\}$  (ii)  $\{5,1,3\}$  (iii)  $\{2,4,3\}$   
(iv)  $\{\}$  (v)  $\{1\}$
- 

2. Which of the following is a subset of  $A = \{9,5,3,7,4,8\}$  ?

- (i)  $\{2,1,6\}$  (ii)  $\{2,1,9\}$  (iii)  $\{9,6\}$   
(iv)  $\{9,8,5,4,1,3\}$  (v)  $\{9\}$
- 

3. Which of the following is a subset of  $A = \{7,5,4,15,9,0\}$  ?

- (i)  $\{8,2\}$  (ii)  $\{\}$  (iii)  $\{2,8,6\}$   
(iv)  $\{6\}$  (v)  $\{0,7,6,15,4,5\}$
- 

4. Which of the following is 'subset' symbol?

- (i)  $\supseteq$  (ii)  $\nsubseteq$  (iii)  $\subset$  (iv)  $\in$  (v)  $\cup$
- 

5. Which of the following is 'subset or equal to' symbol?

- (i)  $\subset$  (ii)  $\cup$  (iii)  $\in$  (iv)  $\subseteq$  (v)  $\cap$
- 

6. Which of the following is 'not a subset' symbol?

- (i)  $\cap$  (ii)  $\nsubseteq$  (iii)  $\supset$  (iv)  $\notin$  (v)  $\supseteq$
- 

7. Which of the following is 'superset' symbol?

- (i)  $\nsubseteq$  (ii)  $\supset$  (iii)  $\subseteq$  (iv)  $\supseteq$  (v)  $\nsubseteq$
- 

8. Which of the following is 'superset or equal to' symbol?

- (i)  $\in$  (ii)  $\nsubseteq$  (iii)  $\leftrightarrow$  (iv)  $\cap$  (v)  $\supseteq$
- 

9. Which of the following is 'not a superset' symbol?

- (i)  $\supset$  (ii)  $\subset$  (iii)  $\nsubseteq$  (iv)  $\notin$  (v)  $\nsubseteq$
- 

10. Find the number of subsets of  $A = \{1,0,5,2,4\}$

---

(i) 33 (ii) 32 (iii) 31 (iv) 29 (v) 35

---

11. Which of the following is a proper subset of  $A = \{1,2,4\}$  ?

(i)  $\{4,3\}$  (ii)  $\{1,5,4\}$  (iii)  $\{0,1\}$  (iv)  $\{1,2\}$  (v)  $\{1,2,4\}$

---

12. Find the number of proper subsets of  $A = \{0,1,5,2,3\}$

(i) 30 (ii) 28 (iii) 31 (iv) 32 (v) 34

---

13. Which of the following is not a subset of  $A = \{5,1,2,6,0\}$  ?

(i)  $\{0,6,2,5\}$  (ii)  $\{6,5,1\}$  (iii)  $\{5,0,1,6\}$   
(iv)  $\{5,1,2,6,0\}$  (v)  $\{7,6,2,5\}$

---

14. Which of the following is superset of  $A = \{9,3,1,6,4\}$  ?

(i)  $\{6,9,5,4,3\}$  (ii)  $\{3,1,6\}$  (iii)  $\{4,8,9,6,1\}$  (iv)  $\{9,3,7,1,4,6\}$  (v)  $\{1,6,3,9\}$

---

15. Which of the following is not a superset of  $A = \{5,6,9,4,0,7,8\}$  ?

(i)  $\{4,0,5,3,6,7,9,8\}$  (ii)  $\{7,0,6,9,4,8,1\}$  (iii)  $\{0,5,9,8,7,4,6,1\}$   
(iv)  $\{2,6,9,5,8,0,4,7\}$  (v)  $\{9,7,6,8,0,5,4\}$

---

16. If  $A = \{4,1,8,3,9\}$ , which of the following are true?

- a)  $A \supset 8$
  - b)  $8 \notin A$
  - c)  $\{3\} \subset A$
  - d)  $8 \in A$
  - e)  $8 \subset A$
- (i)  $\{b,d,c\}$  (ii)  $\{b,d\}$  (iii)  $\{c,d\}$  (iv)  $\{a,c\}$  (v)  $\{e,a,c\}$
- 

17. If A and B are disjoint sets, which of the following are true?

- a)  $A \cap B = A$
  - b)  $A \subset B$
  - c)  $B \subset A$
  - d)  $A \cap B = \emptyset$
  - e)  $A \cup B = A$
- (i)  $\{b,d\}$  (ii)  $\{a,d\}$  (iii)  $\{d\}$  (iv)  $\{c,e,d\}$
-

18. If  $A = \{e, b, s, q, w\}$ , which of the following are true?

- a)  $s \subset A$
  - b)  $A \supset s$
  - c)  $\{s, e\} \subset A$
  - d)  $s \in A$
  - e)  $s \notin A$
- (i)  $\{c, d\}$  (ii)  $\{e, a, c\}$  (iii)  $\{a, c\}$  (iv)  $\{b, d\}$  (v)  $\{b, d, c\}$
- 

19. Given sets A, B and C, where  $A \subset B \subset C$ , which of the following are true?

- a)  $B \supset A$
  - b)  $C \subset A$
  - c)  $C \supset B$
  - d)  $B \subset A$
  - e)  $\emptyset \subset B$
- (i)  $\{d, c\}$  (ii)  $\{a, c, e\}$  (iii)  $\{b, a, c\}$  (iv)  $\{b, a\}$  (v)  $\{b, d, e\}$
- 

20. If  $A \subset B$ , then which of the following are true?

- a)  $A' \subset B$
  - b)  $B \subset A$
  - c)  $A' = B$
  - d)  $B \supset A$
  - e)  $A = B$
- (i)  $\{c, e, d\}$  (ii)  $\{d\}$  (iii)  $\{b, d\}$  (iv)  $\{a, d\}$
- 

21. If  $A \subset B$ , then which of the following are true?

- a)  $A \cap B = B$
  - b)  $A \cap B = A$
  - c)  $A \cup B = A$
  - d)  $A \cup B = \emptyset$
  - e)  $A \cup B = B$
- (i)  $\{a, b\}$  (ii)  $\{d, a, b\}$  (iii)  $\{c, e, b\}$  (iv)  $\{c, e\}$  (v)  $\{b, e\}$
- 

22. If  $A \subset B$ , then which of the following are true?

- a)  $A \cup B = \emptyset$
  - b)  $A - B = \emptyset$
  - c)  $A - B = B$
  - d)  $B - A = A$
  - e)  $B - A = B$
- (i)  $\{b\}$  (ii)  $\{a, b\}$  (iii)  $\{d, e, b\}$  (iv)  $\{c, b\}$

---

Given 5 sets  $A = \{5, 6, 1, 10\}$  ,  $B = \{10, 5, 1, 6\}$  ,  $C = \{8, 6, 4, 9, 5, 2, 3\}$  ,

23.  $D = \{11, 17, 13, 15, 16, 19, 12\}$  and  $E = \{8, 6, 3, 9, 5, 10, 2, 7, 4, 1\}$  ,

which of the following are true?

- a)  $A = B$
- b)  $C = D$
- c)  $A \leftrightarrow C$
- d)  $A \subset C$
- e)  $C \leftrightarrow D$

(i)  $\{c, e, a\}$  (ii)  $\{b, a\}$  (iii)  $\{c, e\}$  (iv)  $\{a, e\}$  (v)  $\{d, b, a\}$

---

## Assignment Key

---

- 1) (iv)
- 2) (v)
- 3) (ii)
- 4) (iii)
- 5) (iv)
- 6) (ii)
- 7) (ii)
- 8) (v)
- 9) (iii)
- 10) (ii)
- 11) (iv)
- 12) (iii)
- 13) (v)
- 14) (iv)
- 15) (ii)
- 16) (iii)
- 17) (iii)
- 18) (i)
- 19) (ii)
- 20) (ii)
- 21) (v)
- 22) (i)
- 23) (iv)