



1. If $\mu = \{-6,-3,-7,-5,5,7,-2,-8,4,3,-9,6\}$, $A = \{-6,-3,-7\}$ and $B = \{-5,-7,5,7,-2,-6,-3\}$, find $n(A \cup B)$
(i) 8 (ii) 9 (iii) 4 (iv) 6 (v) 7
2. If $A = \{1,-1,7,4\}$ and $\mu = \{1,-1,7,4,5,-4,3\}$, find $A \cap \emptyset$
(i) $\{-1\}$ (ii) $\{5,3\}$ (iii) $\{\}$
3. Which of the following sets have same cardinality?
a) $\{9,6,5,-2,-4\}$
b) $\{-1,4,9,-4\}$
c) $\{-7,-1,-5,-3\}$
d) $\{9,5,4,1,-2,-7\}$
e) $\{-6,-9,4\}$
(i) $\{d,c,b\}$ (ii) $\{b,c\}$ (iii) $\{a,b\}$ (iv) $\{d,c\}$ (v) $\{e,a,b\}$
4. If $A = \{-3,2,-5\}$ and $\mu = \{-3,2,-5,-8,5\}$, find $A \cup \emptyset$
(i) $\{-5,2,-3\}$ (ii) $\{-5,-3\}$ (iii) $\{-3,-10,2\}$ (iv) $\{-3,-5,5\}$ (v) $\{-5,2,-3,-1,4\}$
5. Which of the following is 'union' symbol?
(i) \cup (ii) \notin (iii) \neq (iv) \subseteq (v) \subset
6. If $A = \{-8,-4,3,-7\}$ and $\mu = \{-8,-4,3,-7,0,-5,2\}$, find $A \cap A$
(i) $\{-4,-7,3\}$ (ii) $\{\}$ (iii) $\{-9,3,-7,-4\}$ (iv) $\{-4,3,-8,-7,2,0\}$ (v) $\{-7,-4,-8,3\}$
7. Which of the following is 'intersection' symbol?
(i) \notin (ii) \leftrightarrow (iii) \cup (iv) \cap (v) \notin
8. If $A = \{0,9,7,8,14\}$ and $B = \{5,8,3,12,4\}$, then $B \cup A =$
(i) $\{8,3,12,7,9,0,5,14\}$ (ii) $\{3,12,4,5,8,7,9,0,14\}$ (iii) $\{14,12,4,17,7,5,8,3,9,0\}$ (iv) $\{19,7,12,4,5,14,3,9,8\}$
(v) $\{8,4,5,3,0,9,12,14\}$
9. If $\mu = \{-7,-5,-1,8,-4,-9,6,1,3,-3,9,0\}$, $A = \{-7,-5,-1\}$ and $B = \{8,-4,-9,6,1,3,-5\}$, find $n(B)$
(i) 7 (ii) 8 (iii) 4 (iv) 9 (v) 6
10. Which of the following is an empty set?
(i) $\{\}$ (ii) $\{\text{empty}\}$ (iii) $\{\emptyset\}$ (iv) $\{0\}$ (v) $\{o\}$
11. Which of the following are overlapping sets?
(i) $\{12,18,9,7,14,2,10\}, \{2,16,3,18,6,10\}$ (ii) $\{12,18,9,7,14,2,10\}, \{16,3,6\}$
(iii) $\{12,9,7,14\}, \{2,16,3,18,6,10\}$ (iv) $\{12,9,7,14\}, \{16,3,6\}$ (v) $\{12,18,9,7,14,2,10\}, \{\}$
12. If $A = \{6,4,9\}$ and $B = \{8,5,6\}$, then $B \cap A =$
(i) $\{6,4\}$ (ii) $\{6,15\}$ (iii) $\{6,8\}$ (iv) $\{5,9,6\}$ (v) $\{6\}$

13. If $A = \{8,7,6,14,5\}$ and $B = \{7,15,12,1,6\}$, then $A \cup B =$
(i) $\{1,8,12,15,6,7,5\}$ (ii) $\{12,1,5,8,6,14,15\}$ (iii) $\{5,15,8,14,6,7,17,12\}$ (iv) $\{6,17,12,15,7,5,8,1,14\}$
(v) $\{5,15,1,14,12,8,7,6\}$
14. Which of the following elements belong to the set $\{8,3,6,7,5\}$?
(i) (-2) (ii) 15 (iii) 7 (iv) (-1) (v) 16
15. Which of the following is a null set?
(i) $\{3,9\}$ (ii) $\{7,-9,4,3,0\}$ (iii) $\{-7,0,8\}$ (iv) $\{\}$ (v) $\{-7,-5,-3,2\}$
16. Which of the following is 'does not belongs to' symbol?
(i) \leftrightarrow (ii) \neq (iii) \cup (iv) \notin (v) \cap
17. For any two non-empty sets A and B, which of the following are true?
a) $A \cap B = B \cap A$
b) $A \cup B = B \cap A$
c) $A \cup B = B \cup A$
d) $A \cap B = B \cup A$
e) $A \cup B = \emptyset$

(i) $\{a,c\}$ (ii) $\{b,a\}$ (iii) $\{d,c\}$ (iv) $\{e,b,a\}$ (v) $\{d,c,a\}$
18. Which of the following are true?
a) $A \cup \emptyset = A$
b) $A \cap \emptyset = A$
c) $A \cup \emptyset = \emptyset$
d) $A \cup A = \emptyset$
e) $A \cup A = A$

(i) $\{d,b,a\}$ (ii) $\{c,e,a\}$ (iii) $\{a,e\}$ (iv) $\{b,a\}$ (v) $\{c,e\}$
19. If $A = \{10,6,4,5\}$ and $B = \{4,3,0,9\}$, then $B \cup A =$
(i) $\{10,6,0,4,9,5\}$ (ii) $\{6,3,15,9,4,10,5,0\}$ (iii) $\{5,6,4,0,10,3,9\}$ (iv) $\{0,4,9,5,6,3\}$ (v) $\{9,15,4,0,3,6,5\}$
20. Find the cardinality of $A = \{-8,-3,-6\}$
(i) 1 (ii) 4 (iii) 3 (iv) 6 (v) 2
21. Which of the following symbols represent the set of Whole numbers ?
(i) W (ii) Q' (iii) R (iv) Q (v) N
22. If $A = \{-7,-2,6,1,9\}$ and $\mu = \{-7,-2,6,1,9,2,4,-3\}$, find $A \cup \mu$
(i) $\{-7,1,9,-2,6\}$ (ii) $\{9,1,3,4,-2,6,-7\}$ (iii) $\{7,-7,1,-2,6\}$ (iv) $\{6,-7,3,9,-2\}$ (v) $\{6,9,-2,1\}$
23. Which of the following is a null set?
(i) $\{\emptyset\}$ (ii) $\{0\}$ (iii) \emptyset (iv) $\{o\}$ (v) $\{\text{empty}\}$
24. If $A = \{0,1,10,8,5\}$ and $B = \{4,9,7,6,5\}$, then $B \cap A =$
(i) $\{5\}$ (ii) $\{5,9\}$ (iii) $\{4,0,5\}$ (iv) $\{10,5\}$ (v) $\{14,5\}$

25. If $A = \{6,10,9,0,1,15,3\}$ and $B = \{9,12,0,5,8,13,4\}$, then $B \cap A =$

- (i) $\{9,0\}$ (ii) $\{3,9,0\}$ (iii) $\{9,18,0\}$ (iv) $\{0,10,4,9\}$ (v) $\{9,0,13\}$

Assignment Key

1) (v)	2) (iii)	3) (ii)	4) (i)	5) (i)	6) (v)
7) (iv)	8) (ii)	9) (i)	10) (i)	11) (i)	12) (v)
13) (v)	14) (iii)	15) (iv)	16) (iv)	17) (i)	18) (iii)
19) (iii)	20) (iii)	21) (i)	22) (i)	23) (iii)	24) (i)
25) (i)					