EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Sets

Grade : ICSE Grade VI

1. If A = {1,0,3} and B = {1,0,3} , then A ∪ B =

   (i) {1,3,0} (ii) {0,1,3,9} (iii) {0,3} (iv) {0,1} (v) {3,7,0}

2. Which of the following are true?

   a) A ∪ A = ∅
   b) A ∪ ∅ = A
   c) A ∩ ∅ = A
   d) A ∪ ∅ = ∅
   e) A ∪ A = A

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

3. If μ = {-2,-4,5,-3,3,-5,-1,0,1,8,-9,9,6,-8,7}, A = {-2,-4,5,-3,3,-5,-1} and B = {5,-4,-1,0}, find n(A)

   (i) 5 (ii) 6 (iii) 10 (iv) 7 (v) 8

4. Which of the following is a null set?

   (i) {0} (ii) {o} (iii) {∅} (iv) {empty} (v) ∅

5. If μ = {-1,-6,1,5,-2,8,-8,4,-3,9,2,-7,-9,3,-4,-5}, A = {-1,-6,1,5,-2,8,-8} and B = {4,-3,9,-1,2}, find n(A ∪ B)

   (i) 11 (ii) 12 (iii) 10 (iv) 14 (v) 8

6. If A = {6,2,9} and B = {0,1,6} , then B ∩ A =

   (i) {6} (ii) {11,6} (iii) {1,6,2} (iv) {6,1} (v) {6,9}

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

   (i) ⊄ (ii) ∈ (iii) ⊇ (iv) ⊃ (v) ∪

8. Which of the following is a null set?

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

9. Which of the following is 'does not belongs to' symbol?

   (i) ⊂ (ii) ⊅ (iii) ⊇ (iv) ∉ (v) ∪

10. If A = {5,0,3} and B = {6,2,3} , then A ∩ B =

    (i) {3} (ii) {3,0,5} (iii) {11,3} (iv) {3,6} (v) {5,3}

11. Which of the following are null sets?

    a) {4,1,6}
    b) {∅}
    c) {empty}
    d) {}
    e) ∅

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

12. Which of the following is an infinite set?

(i) {} (ii) {0,1,2,3,4,...} (iii) {-2,-3,9} (iv) {7} (v) {7,-6}

13. If A = {0,6,13,1,3} and B = {6,14,7,3,9} , then A ∪ B =

(i) {3,7,6,0,13,1,9} (ii) {0,9,1,6,13,14,7,19} (iii) {0,14,9,7,1,13,3} (iv) {18,1,3,6,0,14,7,13,9}

(v) {1,3,7,13,0,6,14,9}

14. If A = {-3,9,8,5,-1,-2,-6} and μ = {-3,9,8,5,-1,-2,-6,0,7,1,-7}, find A ∪ μ

(i) {-1,-3,-2,9,8,0,6,-7,-6,5,1} (ii) {5,1,-6,-1,-2,7,0,8,9,-3,-7} (iii) {-6,7,8,3,-1,-3,-2,0,9,4,5,1,-7}

(iv) {5,-1,7,-2,8,-3,0,9,-7,1} (v) {-8,7,-5,-2,8,9,5,2,-7,1,-1}

15. If A = {-3,1,5,-1} and μ = {-3,1,5,-1,4,-4,2}, find A ∩ ∅

(i) {} (ii) {-1,2} (iii) {-1} (iv) {3} (v) {2}

16. If A = {-6,-2,0,9} and μ = {-6,-2,0,9,-9,-4,3}, find A ∩ A

(i) {-6,-3,0,10} (ii) {-2,-6,0} (iii) {-6,9,-2,0} (iv) {-6,9,0,-1} (v) {0,-2,-1,9,5,-6}

17. Which of the following are disjoint sets?

(i) {15,5,17,3,12,2} , {15,5,17,3,12,2} (ii) {15,5,17,3,12,2} , {19,15,5,20,13,2} (iii) {} , {15,5,17,3,12,2}

(iv) {17,3,12} , {19,20,13} (v) {15,5,17,3,12,2} , {}

18. Which of the following symbols represent the set of Whole numbers ?

(i) N (ii) W (iii) Z (iv) Q (v) Q'

19. If μ = {7,8,4,-7,-9,-5,3,-3,0,-2,-1,1}, A = {7,8,4,-7} and B = {-9,-5,7,3,-7}, find n(B)

(i) 6 (ii) 2 (iii) 4 (iv) 5 (v) 7

20. What is the cardinality of an empty set?

(i) 6 (ii) 1 (iii) 3 (iv) 0 (v) 5

21. If A = {0,3,9,2,4} and B = {0,3,6,4,7} , then B ∩ A =

(i) {4,0,3} (ii) {14,3,0,4} (iii) {3,0,4,7} (iv) {4,9,6,0,3} (v) {0,4,3,2}

22. If μ = {8,0,5,1,-5,2,-1,-2,4,-6,-4,6,-7,-3}, A = {8,0,5,1,-5,2,-1} and B = {-1,-2,4}, find n(A ∩ B)

(i) 0 (ii) 2 (iii) (-2) (iv) 1 (v) 4

23. For any two non-empty sets A and B, which of the following are true?

a) A ∪ B = B ∩ A
b) A ∩ B = B ∪ A
c) A ∪ B = B ∪ A
d) A ∩ B = B ∩ A
e) A ∪ B = ∅

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

24. If A = {9,13,4,12,14,0,5} and B = {7,9,4,10,2,11,12} , then B ∩ A =

(i) {16,9,12,4} (ii) {9,4,11,12,2} (iii) {4,12,0,9} (iv) {4,2,9,12} (v) {4,9,12}

25. If A = {4,7,6,-8,-5} and μ = {4,7,6,-8,-5,0,-6,5}, find A ∩ μ

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

Assignment Key

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