EduSahara™ Assignment

Name : Operations on Sets Using Venn Diagrams

Chapter : Sets

Grade : SSC Grade X

1. Which of the following diagrams represent equivalent sets?

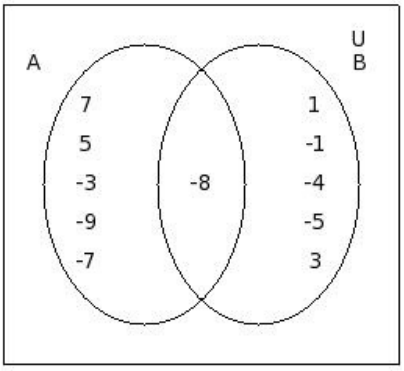


figure 1

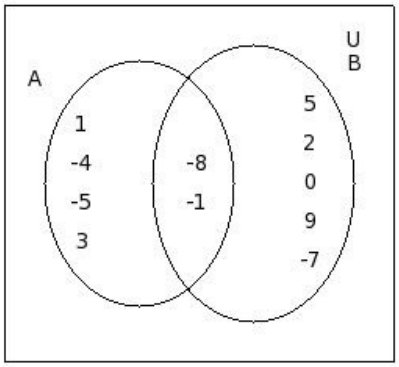


figure 2

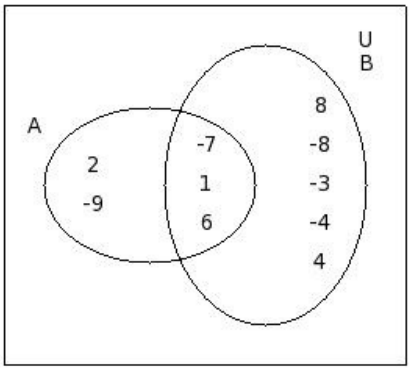


figure 3

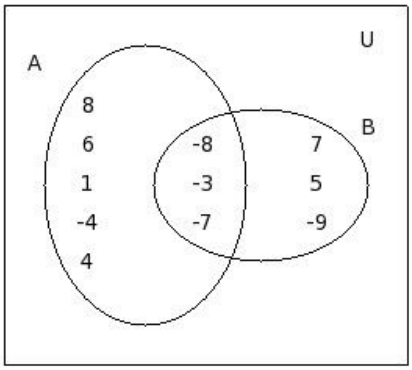


figure 4

(i) figure 2 (ii) figure 4 (iii) figure 3 (iv) figure 1

2. Which of the following diagrams represent equal sets?

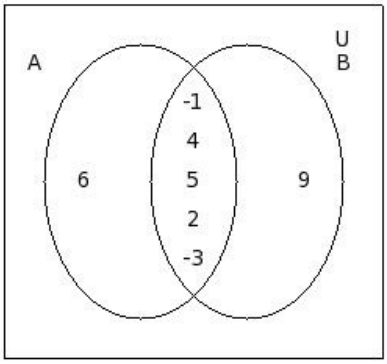


figure 1

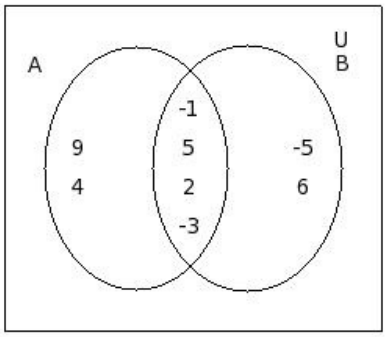


figure 2

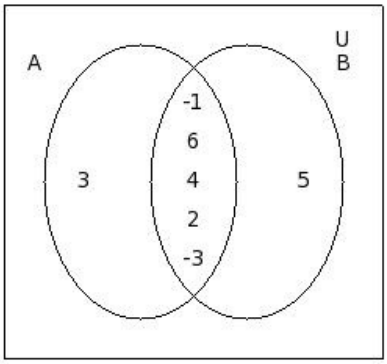


figure 3

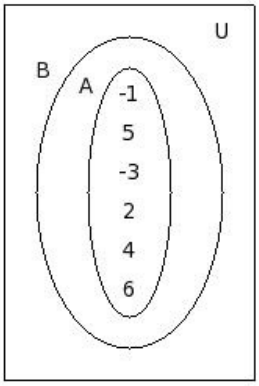


figure 4

(i) figure 2 (ii) figure 4 (iii) figure 1 (iv) figure 3

3. Which of the following diagrams represent 'A is subset of B'?

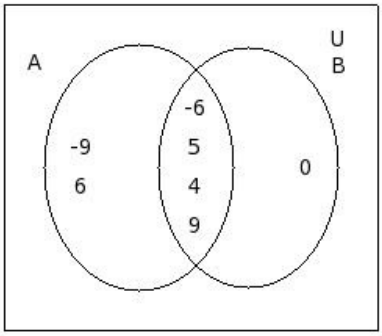


figure 1

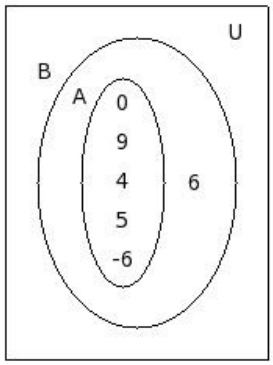


figure 2

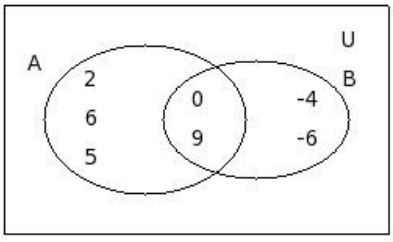


figure 3

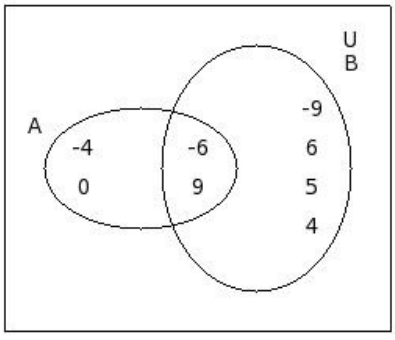
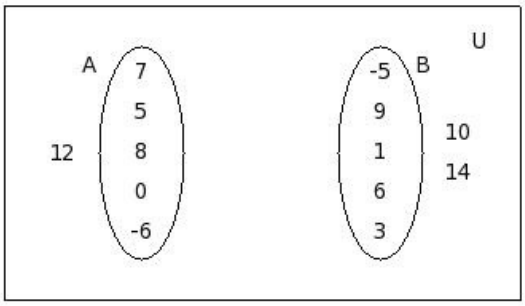


figure 4

(i) figure 3 (ii) figure 2 (iii) figure 1 (iv) figure 4

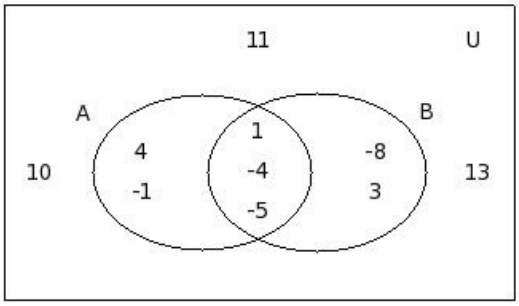
4. A ∪ B =



(i) {6,1,5,9,-6,0,7,3,8} (ii) {-5,0,9,3,8,1,6,5,-6} (iii) {5,9,1,6,0,10,3,7,-5,8,-6} (iv) {6,9,12,0,1,5,-6,8,7,-5}

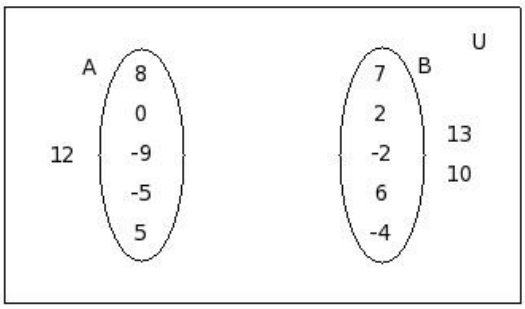
(v) {-6,3,9,-5,8,6,7,1,5,0}

5. A ∩ B =



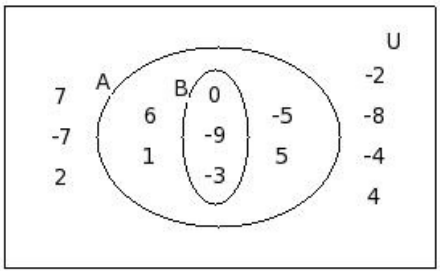
(i) {-4,-8,-5,1} (ii) {10,1,-4,-5} (iii) {-4,-5,1} (iv) {-5,3,-1,-4,1} (v) {-5,-4,1,4}

6. A − B =



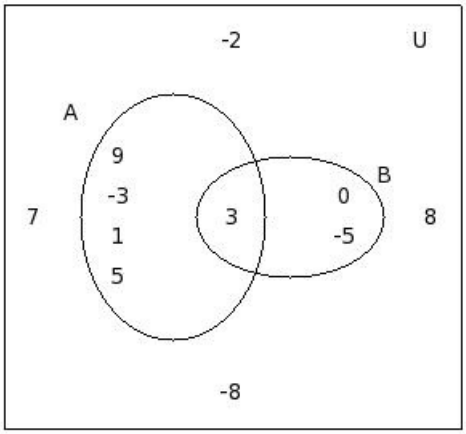
(i) {-4,6,-2,7,2} (ii) {8,5,-9,-3,-5,0} (iii) {5,-5,-9,8,0,12} (iv) {5,-5,8,-9} (v) {5,0,-5,8,-9}

7. Find A



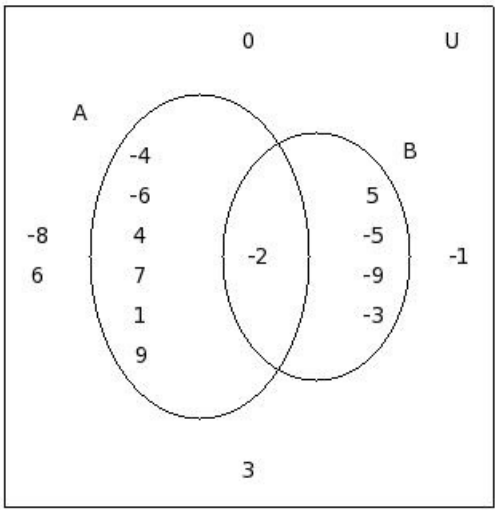
(i) {1,-3,5,0,6,-9,-5} (ii) {1,-9,5,0,6,-5} (iii) {5,6,-4,-3,1,0,-9,-5} (iv) {1,0,-9,2,-3,-5,5} (v) {1,-3,-9,5,6,-5}

8. Find B



(i) {0,3} (ii) {-5,3,0,7} (iii) {-5,-8,0} (iv) {-5,0} (v) {3,0,-5}

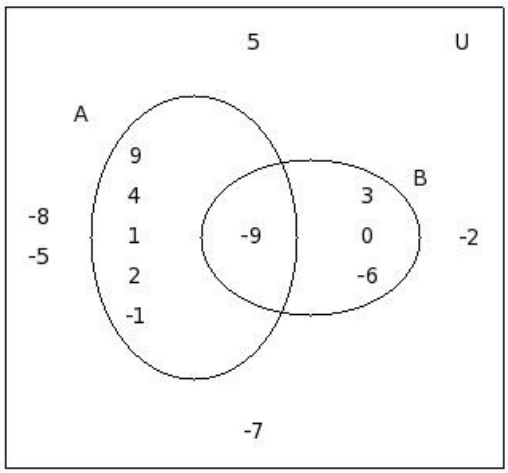
9. Find A ∪ B



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

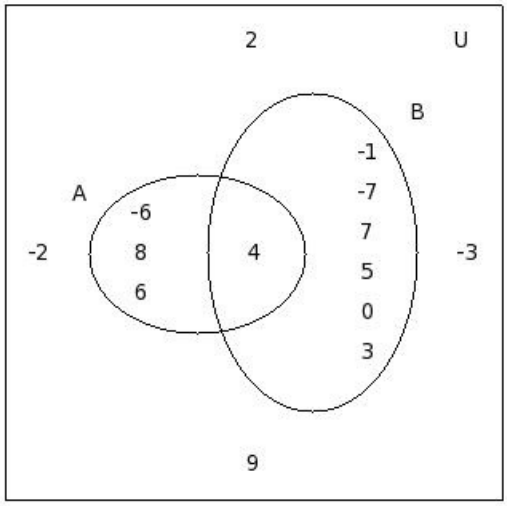
(iv) {4,9,-2,-9,-6,7,-3,1,5,-4,-5} (v) {-9,-4,-6,4,-5,9,-2,7,-3,1}

10. Find A ∩ B



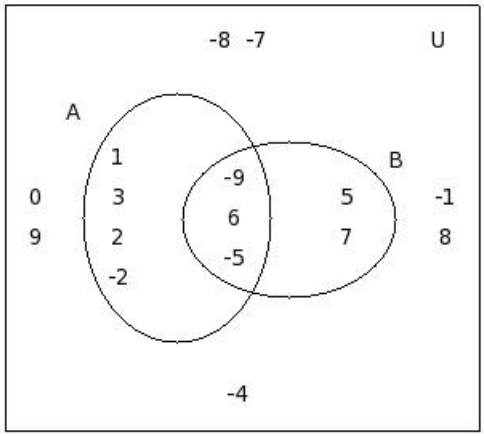
(i) {-9,5} (ii) {5} (iii) {} (iv) {-9}

11. Find A − B



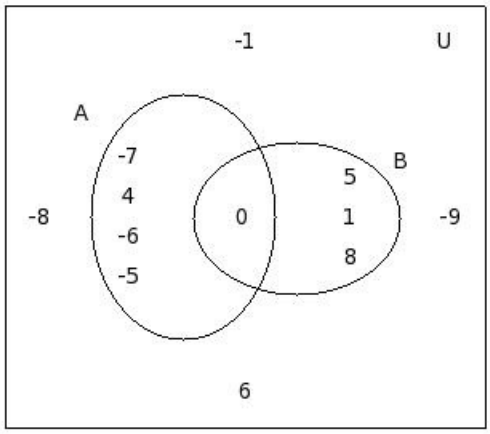
(i) {8,-6} (ii) {9,6,8,-6} (iii) {2,6,8} (iv) {8,-6,6} (v) {}

12. Find B − A



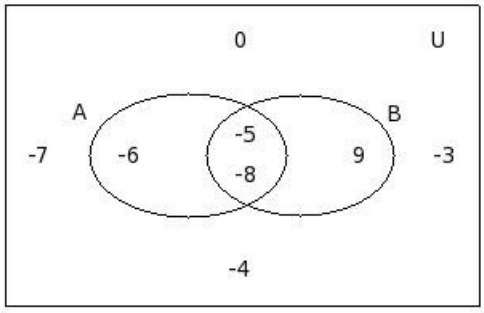
(i) {5} (ii) {7,5} (iii) {} (iv) {7,5,0} (v) {-7,7}

13. Find (A − B) ∪ (B − A)



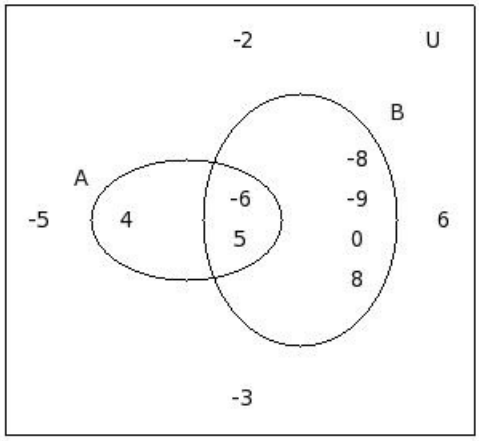
(i) {1,8,-6,-5,5,-7,4} (ii) {4,-6,-5,5,8,-7} (iii) {-7,8,6,4,-6,1,5} (iv) {4,8,-7,1,-6,5} (v) {8,-6,-5,-7,4,1,5,-9}

14. Find (A ∪ B) − (A ∩ B)



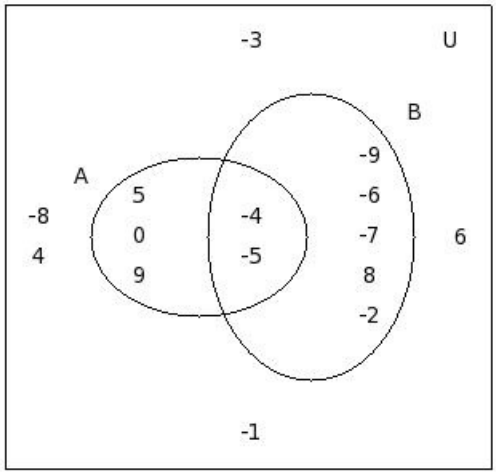
(i) {0,9,-6} (ii) {-6} (iii) {9,-6} (iv) {-6,-3} (v) {9}

15. Find n(A)



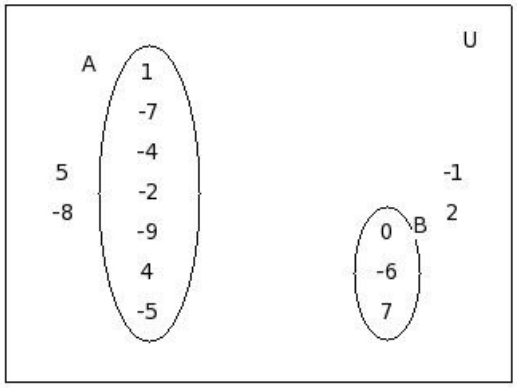
(i) 3 (ii) 1 (iii) 4 (iv) 5 (v) 2

16. Find n(B)



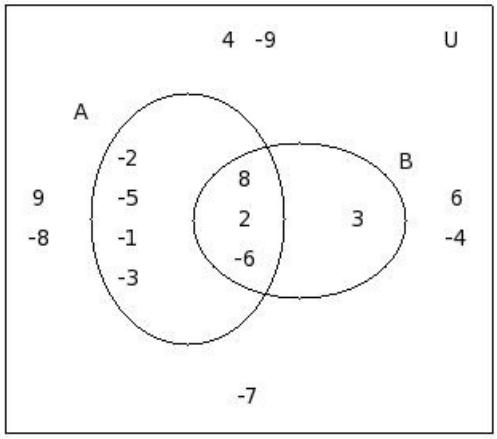
(i) 7 (ii) 8 (iii) 9 (iv) 6 (v) 5

17. Find n(A ∪ B)



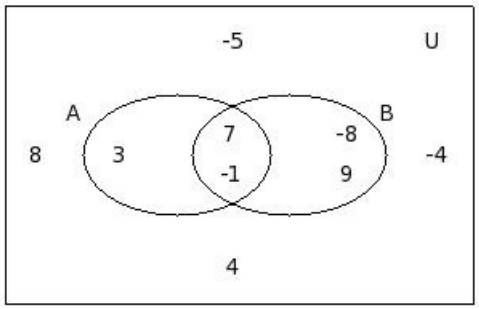
(i) 10 (ii) 8 (iii) 12 (iv) 11 (v) 9

18. Find n(A ∩ B)



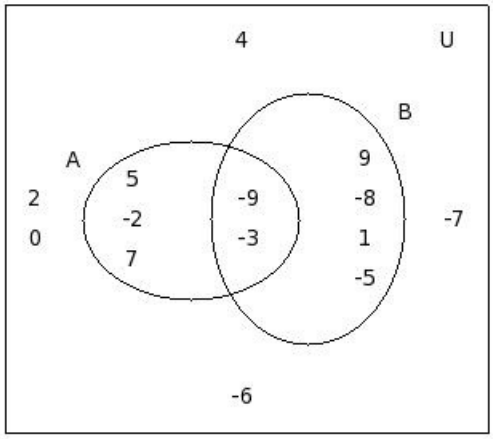
(i) 2 (ii) 5 (iii) 3 (iv) 0 (v) 4

19. Find n(A − B)



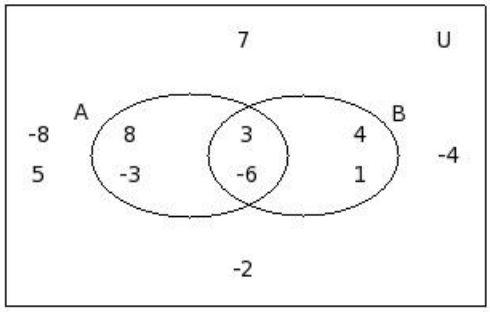
(i) 1 (ii) 0 (iii) 4 (iv) 2 (v) (-2)

20. Find n(B − A)



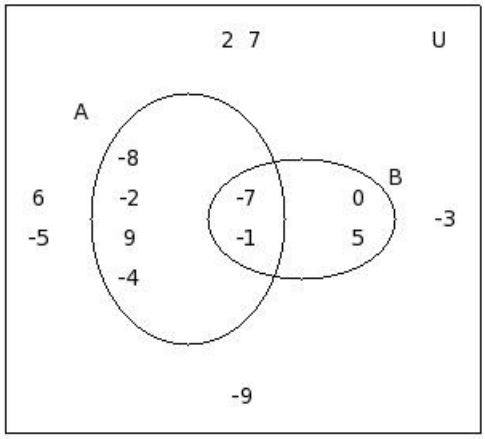
(i) 3 (ii) 4 (iii) 6 (iv) 2 (v) 5

21. Find n((A − B) ∪ (B − A))



(i) 3 (ii) 6 (iii) 2 (iv) 4 (v) 5

22. Find n((A ∪ B) − (A ∩ B))



(i) 3 (ii) 7 (iii) 5 (iv) 6 (v) 8

Assignment Key

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