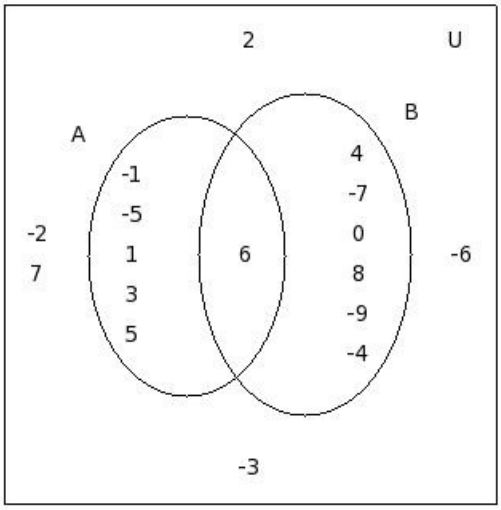
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Venn Diagrams

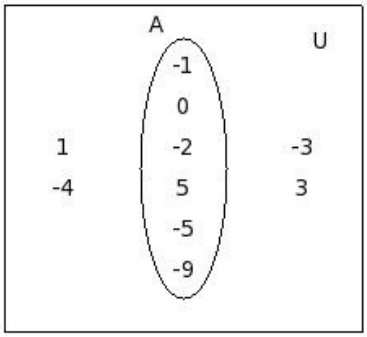
Grade : ICSE Grade VII

1. Find A − B



(i) {3,-5,-1,5} (ii) {-5,1,-1,3,5} (iii) {} (iv) {-5,5,3,-1,1,7} (v) {-1,-5,1,2,5}

2. Find μ



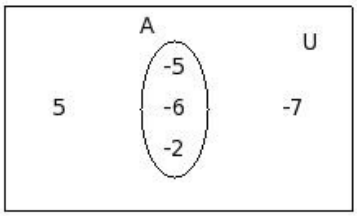
(i) {-2,4,-9,5,-5,-4,0,3,2,-1,-3} (ii) {3,0,-1,-4,-2,-3,-9,5,1,-5} (iii) {-1,0,5,4,-4,-5,-9,3,-2}

(iv) {5,4,-5,-4,-3,-9,-1,-2,2} (v) {-5,-2,5,3,-4,0,-9,-1,1}

3. In a class of 18 students, each one prefers either 'Auto' or 'Moped' or both. If 14 students prefer 'Auto' and 10 students prefer 'Moped', how many prefer 'Auto' only?

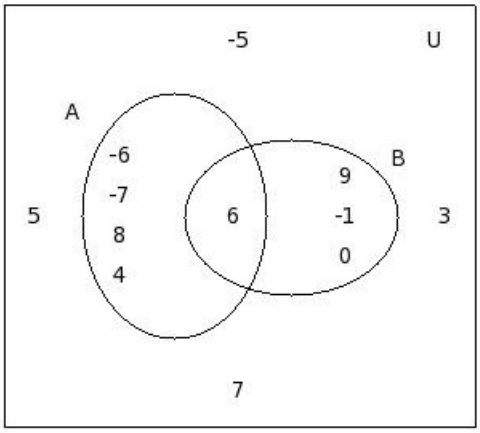
(i) 10 (ii) 9 (iii) 5 (iv) 8 (v) 7

4. Find n(A ∩ A')



(i) 3 (ii) 0 (iii) 1 (iv) (-2) (v) (-1)

5. Find n(A ∪ B)



(i) 6 (ii) 9 (iii) 8 (iv) 7 (v) 11

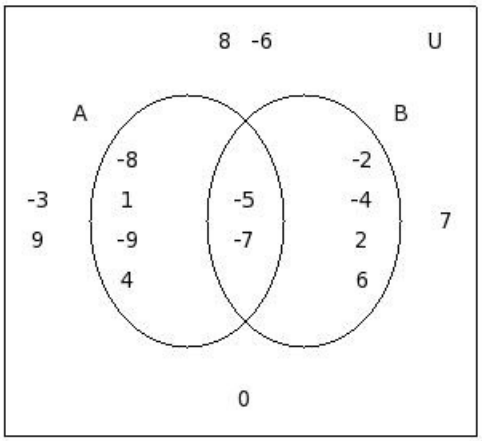
6. In a class of 28 students, if 10 students study 'Sanskrit', 28 students study 'Social Studies' and 10 students study both the subjects, how many study 'Social Studies' only ?

(i) 16 (ii) 19 (iii) 20 (iv) 17 (v) 18

7. In a class of 28 students, each one reads either 'Hans India' or 'Deccan Chronicle' or both. If 11 students read 'Hans India' and 24 students read 'Deccan Chronicle', how many read both the news papers?

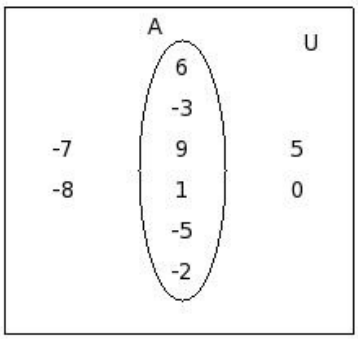
(i) 4 (ii) 6 (iii) 8 (iv) 9 (v) 7

8. Find A'



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

9. Find A ∩ A'



(i) {10} (ii) {10,2} (iii) {10,0,2,5} (iv) {5} (v) {}

10. Which of the following diagrams represent equivalent sets?

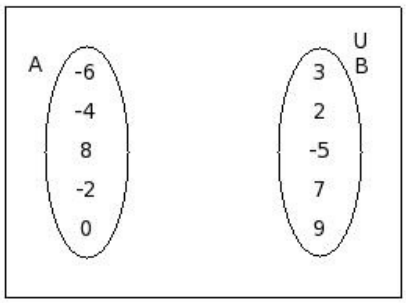


figure 1

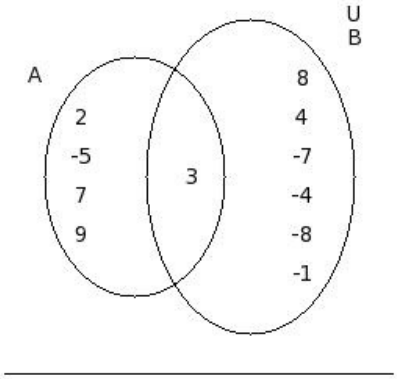


figure 2

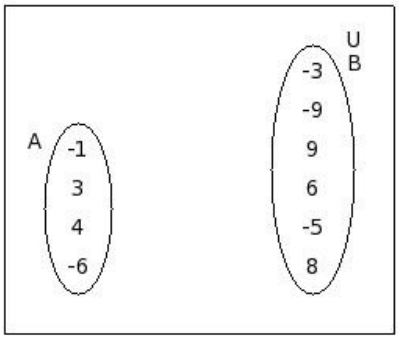


figure 3

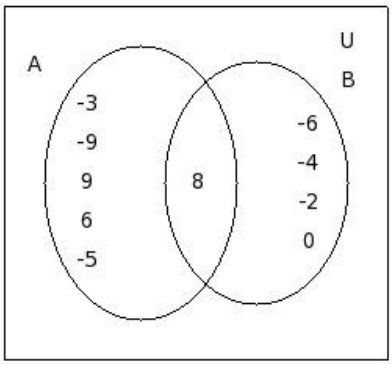
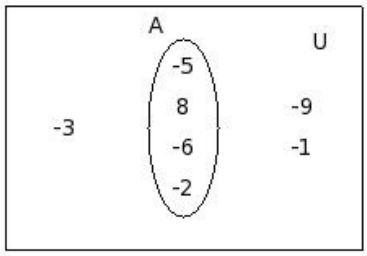


figure 4

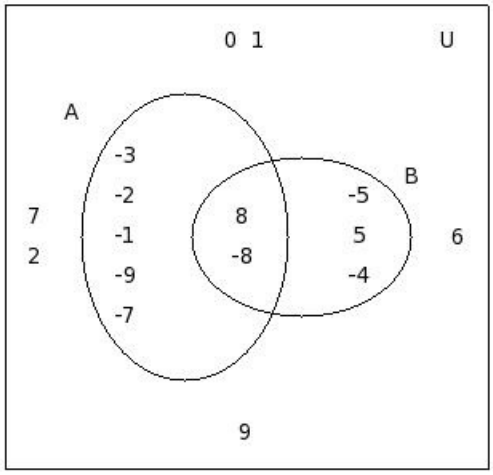
(i) figure 3 (ii) figure 1 (iii) figure 4 (iv) figure 2

11. Find n(∅)



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

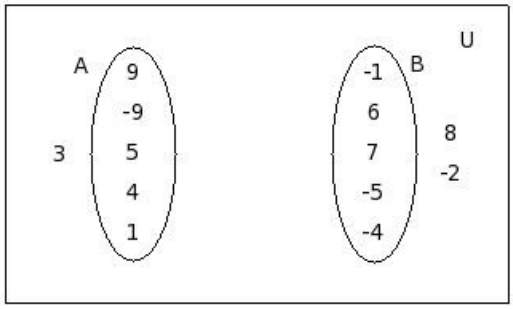
12. Find A



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

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

13. Find B'



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

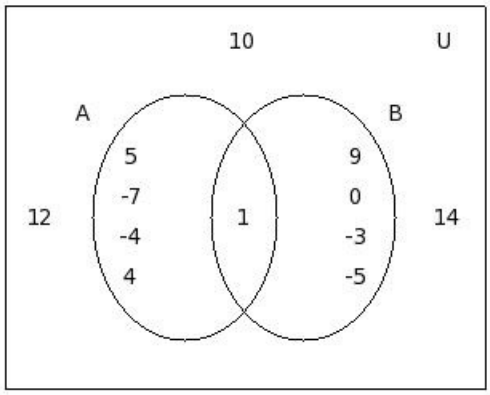
14. In a class of 25 students, each one likes either 'Reading books' or 'Painting' or both. If 17 students like 'Reading books' and 17 students like 'Painting', how many like 'Painting' only?

(i) 7 (ii) 5 (iii) 8 (iv) 11 (v) 9

15. In a class of 27 students, each one likes either 'kabaddi' or 'high jump' or both. If 26 students like 'kabaddi' and 14 students like 'high jump', how many like 'kabaddi' only?

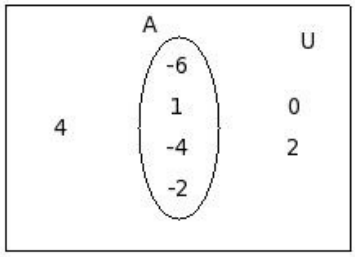
(i) 13 (ii) 10 (iii) 12 (iv) 15 (v) 14

16. A ∩ B =



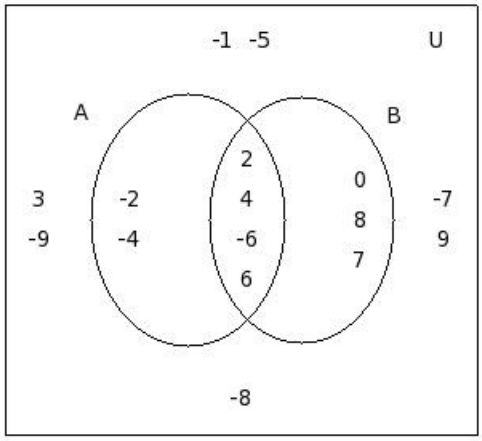
(i) {9,1,-7} (ii) {10,1} (iii) {1,5} (iv) {9,1} (v) {1}

17. Find A ∩ A



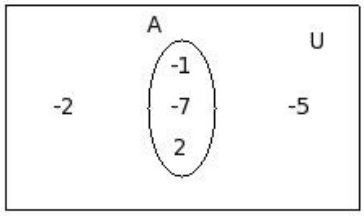
(i) {-4,1,-6,-2} (ii) {-6,-2,-1} (iii) {} (iv) {-2,-6,1} (v) {-6,-1,1,-2,2}

18. Find n((A − B) ∪ (B − A))



(i) 5 (ii) 6 (iii) 3 (iv) 4 (v) 7

19. Find A ∪ ∅

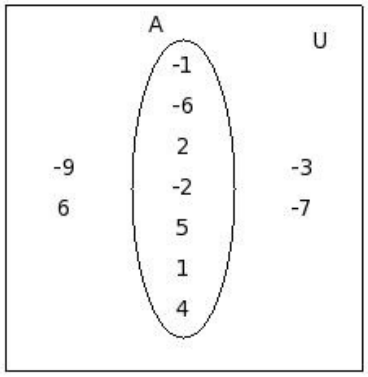


(i) {8,4,-2,5} (ii) {8,-2} (iii) {-7,2} (iv) {-1,2,-7} (v) {-7,3}

20. In a class of 22 students, each one prefers either 'Bicycle' or 'Car' or both. If 12 students prefer 'Bicycle' and 15 students prefer 'Car', how many prefer 'Car' only?

(i) 12 (ii) 7 (iii) 9 (iv) 10 (v) 11

21. Find n(A)



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

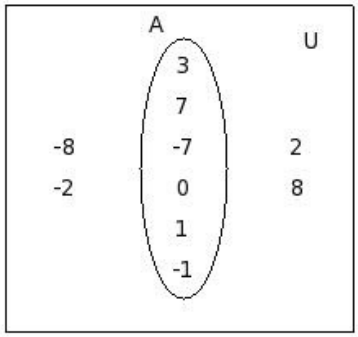
22. In a class of 18 students, each one reads either 'Hindustan Times' or 'News Today' or both. If 10 students read 'Hindustan Times' and 13 students read 'News Today', how many read 'News Today' only?

(i) 9 (ii) 10 (iii) 7 (iv) 5 (v) 8

23. In a class of 33 students, if 26 students study 'Hindi', 9 students study 'French' and 5 students study both the subjects, how many do not study any of the subjects ?

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

24. Find A



(i) {1,-4,-1,6,0} (ii) {3,-1,1,0,-5} (iii) {7,-7,-1,3,0,1} (iv) {-7,-1,0,1,3} (v) {0,1,3,-1,6,-4,5}

25. In a class of 34 students, if 19 students prefer 'Bicycle', 23 students prefer 'Car' and 12 students prefer both the modes of transport, how many prefer 'Car' only ?

(i) 12 (ii) 9 (iii) 10 (iv) 14 (v) 11

Assignment Key

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