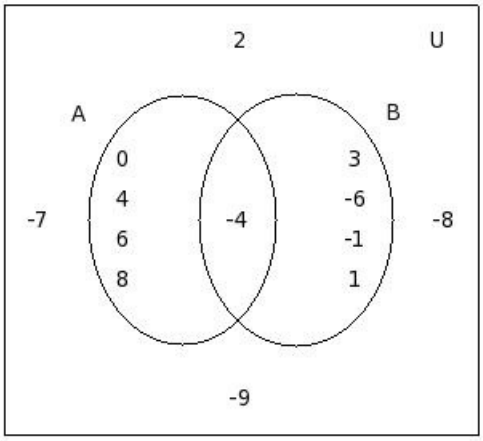
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Venn Diagrams

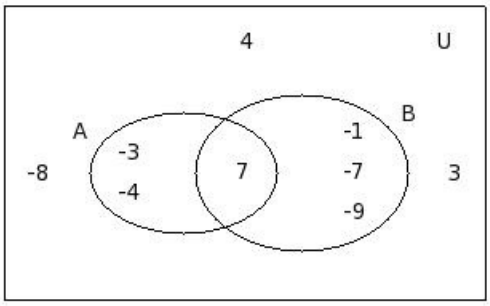
Grade : ICSE Grade VIII

1. Find ((A − B) ∪ (B − A))'



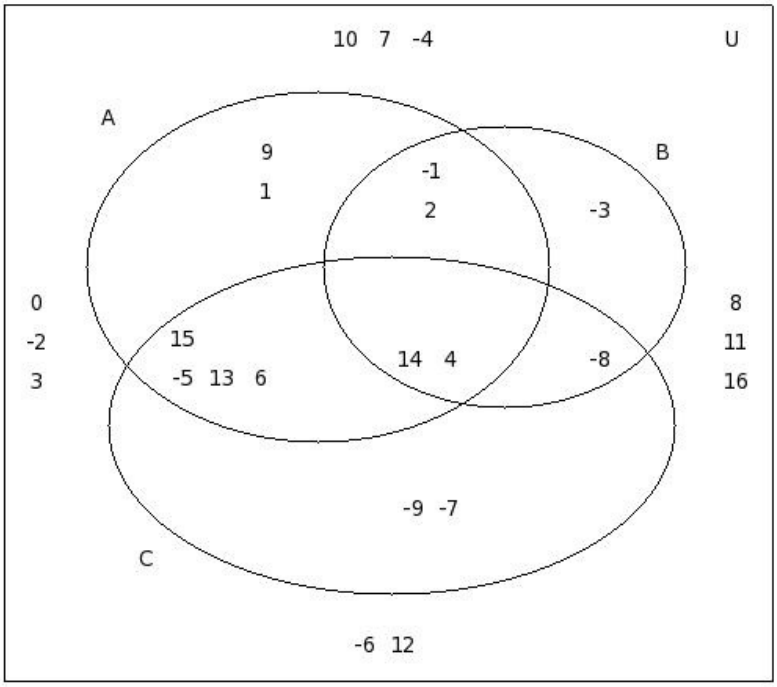
(i) {} (ii) {2,-8,-9,-7,-4} (iii) {2,-8,-9,-7} (iv) {-4,-9,-7,-8}

2. Find n(B')



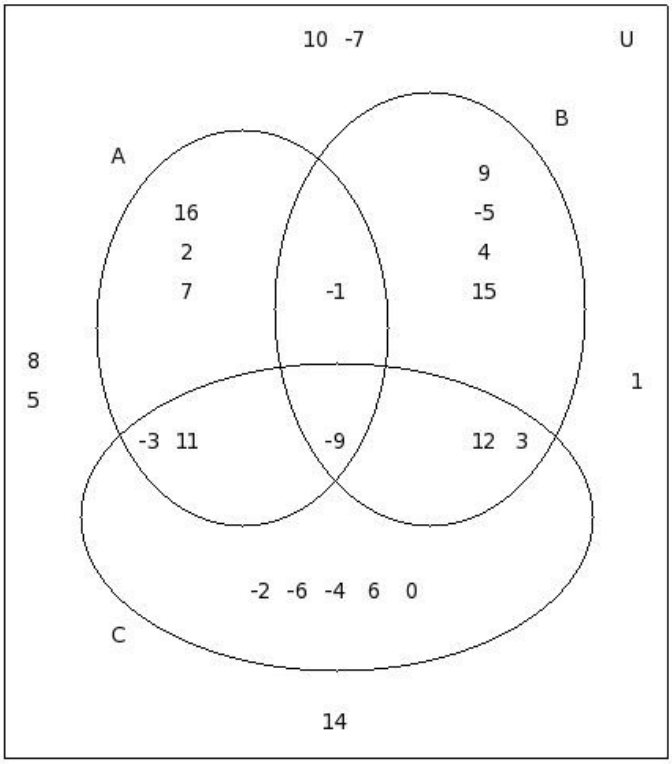
(i) 5 (ii) 8 (iii) 3 (iv) 4 (v) 6

3. Find n(C − (A ∪ B))



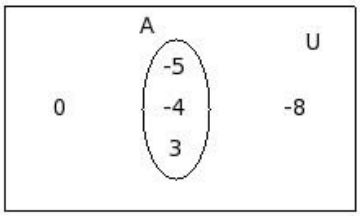
(i) 1 (ii) 4 (iii) 3 (iv) 0 (v) 2

4. Find B ∩ (C ∪ A)



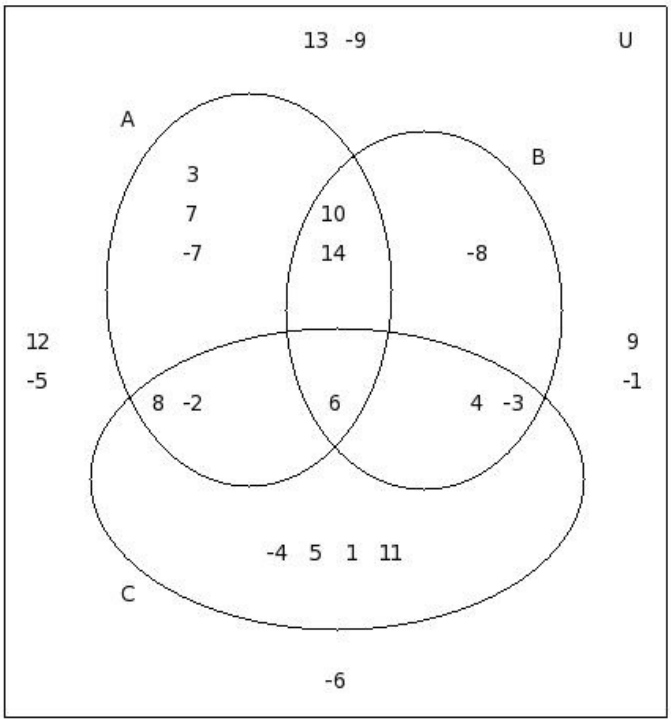
(i) {12,-9,-1,5} (ii) {3,12,-9,-1} (iii) {3,12,-9,-1,5} (iv) {3,12,-9,8} (v) {3,12,-9}

5. Find A ∪ μ



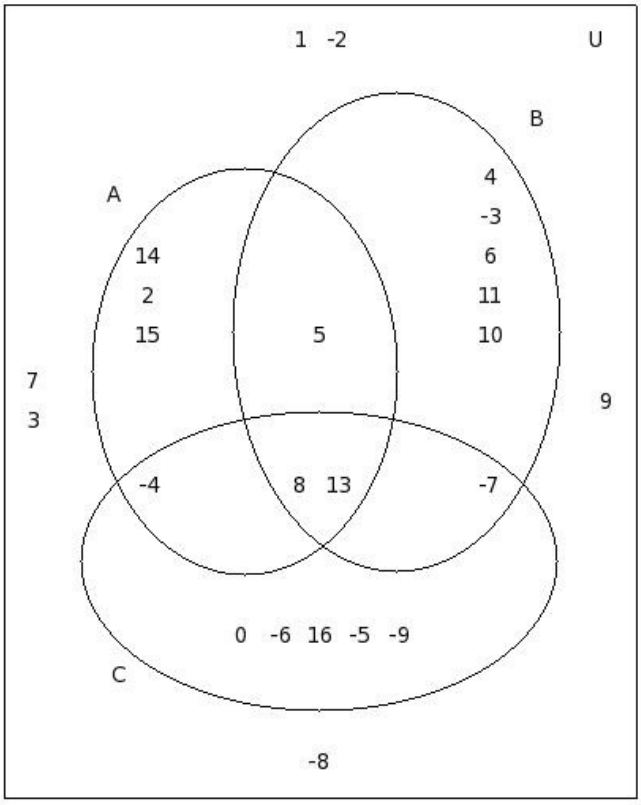
(i) {3,0,-4,-6} (ii) {3,1,2,-4,4,-12} (iii) {-8,-5,0,-4,3} (iv) {-12,4,3,-4} (v) {3,-4,-5,0}

6. Find (A − B) ∩ (A − C)



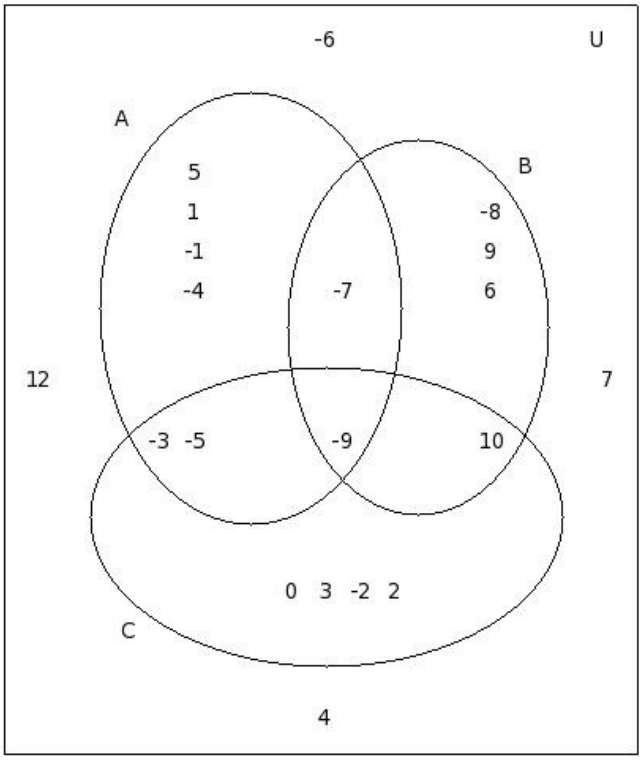
(i) {-7,3,7,-2} (ii) {-7,3,6} (iii) {-7,3,-2} (iv) {-7,3,7} (v) {-7,3}

7. Find n(B ∪ C)



(i) 14 (ii) 17 (iii) 13 (iv) 16 (v) 15

8. Find n((A ∪ B)')



(i) 8 (ii) 6 (iii) 10 (iv) 9 (v) 7

9. In a class of 26 students, 9 students in 'Spanish', 11 students in 'Urdu', 14 students in 'German', 5 students in 'Spanish' and 'Urdu', 5 students in 'Urdu' and 'German', 5 students in 'German' and 'Spanish', 3 students in all the three subjects could get first class marks. How many of them got first class marks in exactly two subjects?

(i) 9 (ii) 5 (iii) 4 (iv) 6 (v) 7

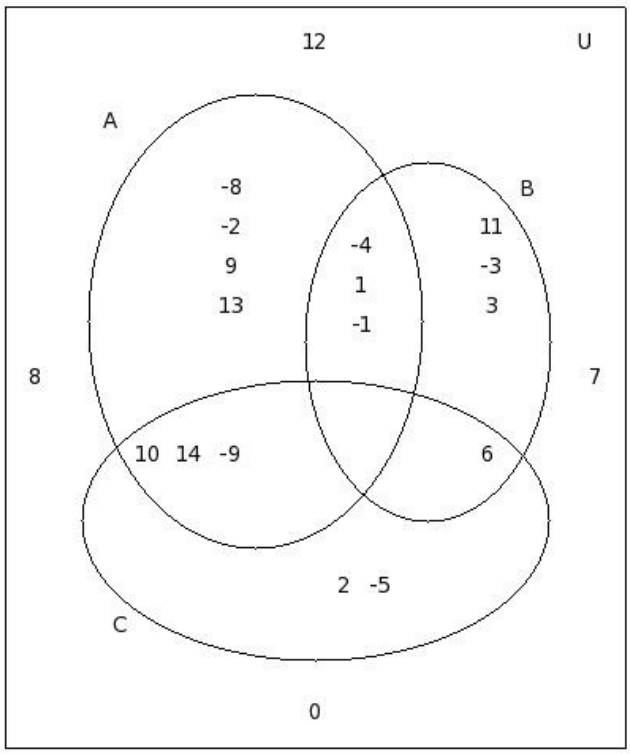
10. In a class of 22 students, each one studies either 'Science' or 'Spanish' or both. If 21 students study 'Science' and 16 students study 'Spanish', how many study 'Science' only?

(i) 8 (ii) 7 (iii) 6 (iv) 4 (v) 5

11. In a class of 27 students, 15 students read 'News Today', 17 students read 'The Hindu', 8 students read 'Hindustan Times', 9 students read 'News Today' and 'The Hindu', 6 students read 'The Hindu' and 'Hindustan Times', 3 students read 'Hindustan Times' and 'News Today', 2 students read all the three news papers. How many of them read only 'Hindustan Times'?

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

12. Find n(B − (C ∩ A))

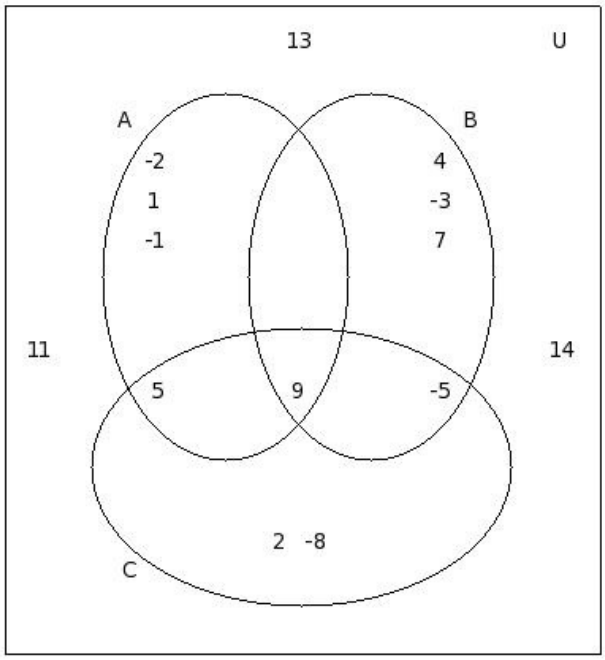


(i) 9 (ii) 4 (iii) 6 (iv) 8 (v) 7

13. In a class of 34 students, 20 students like 'Listening music', 14 students like 'Reading books', 9 students like 'Singing', 9 students like 'Listening music' and 'Reading books', 2 students like 'Reading books' and 'Singing', 5 students like 'Singing' and 'Listening music', 2 students like all the three activities. How many of them like only 'Listening music'?

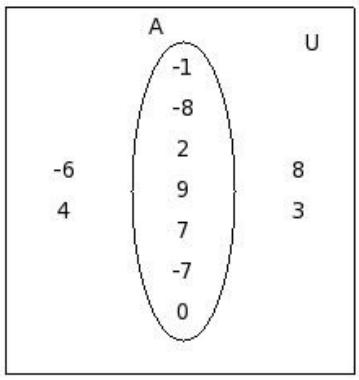
(i) 7 (ii) 9 (iii) 5 (iv) 10 (v) 8

14. (B ∩ C) ∩ A=



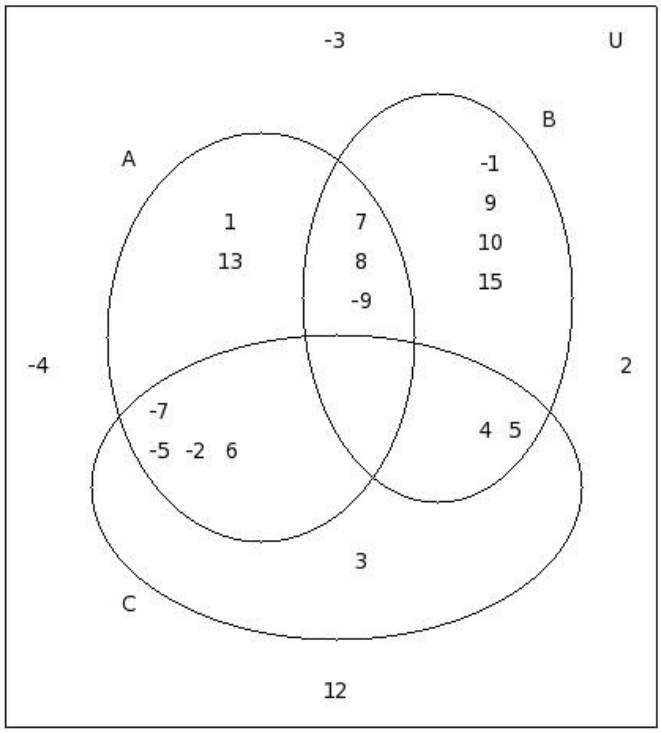
(i) {9} (ii) {9,13} (iii) {-1,9} (iv) {9,-7} (v) {9,0}

15. Find n((A')')



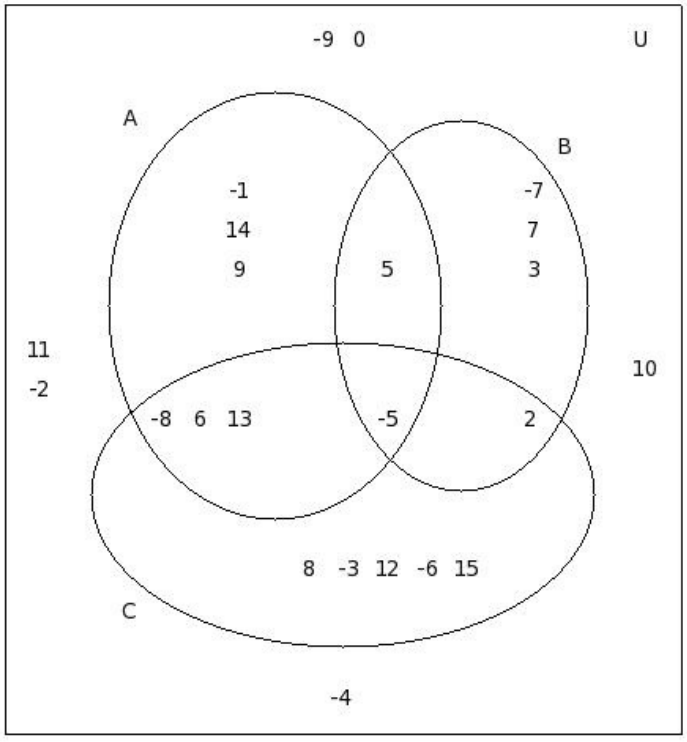
(i) 6 (ii) 5 (iii) 7 (iv) 8 (v) 10

16. Find n(C ∩ (A ∪ B))



(i) 8 (ii) 4 (iii) 6 (iv) 5 (v) 7

17. Find n((B ∩ C)')

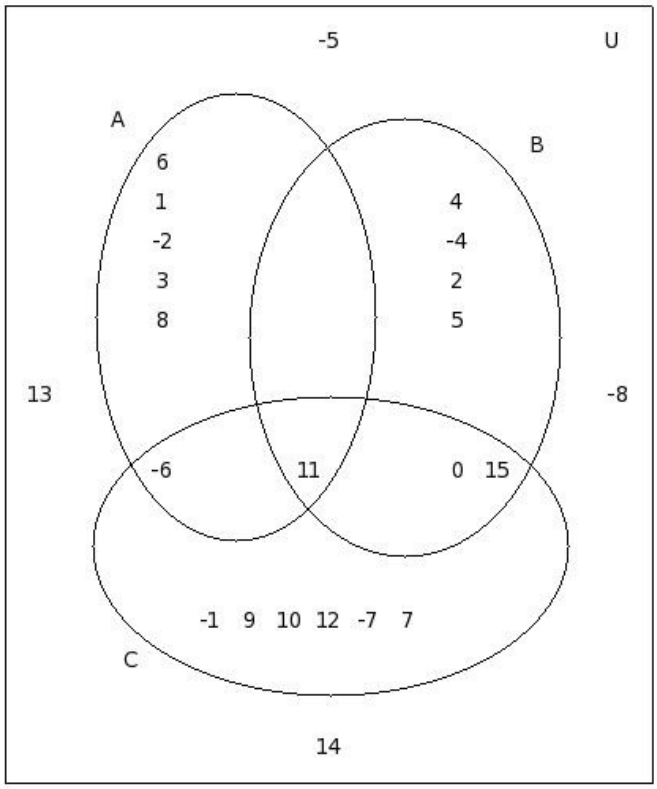


(i) 21 (ii) 20 (iii) 19 (iv) 22 (v) 23

18. In a class of 32 students, 20 students prefer 'School Van', 15 students prefer 'Scooter', 26 students prefer 'RTC Bus', 10 students prefer 'School Van' and 'Scooter', 13 students prefer 'Scooter' and 'RTC Bus', 15 students prefer 'RTC Bus' and 'School Van', 8 students prefer all the three modes of transport. How many of them prefer none?

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

19. Find n(A)

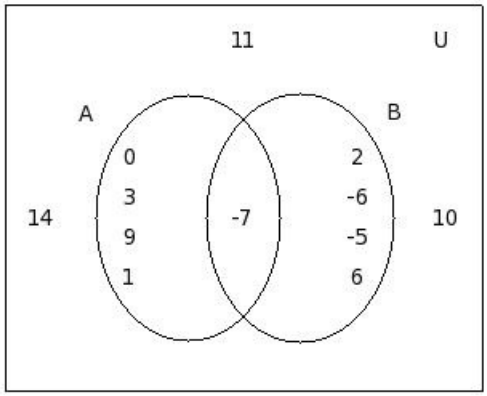


(i) 10 (ii) 7 (iii) 6 (iv) 8 (v) 5

20. In a class of 27 students, 19 students read 'Deccan Chronicle', 5 students read 'Hans India', 6 students read 'Indian Express', 4 students read 'Deccan Chronicle' and 'Hans India', none of the students read 'Hans India' and 'Indian Express', 6 students read 'Indian Express' and 'Deccan Chronicle', none of the students read all the three news papers. How many of them read more than one news paper?

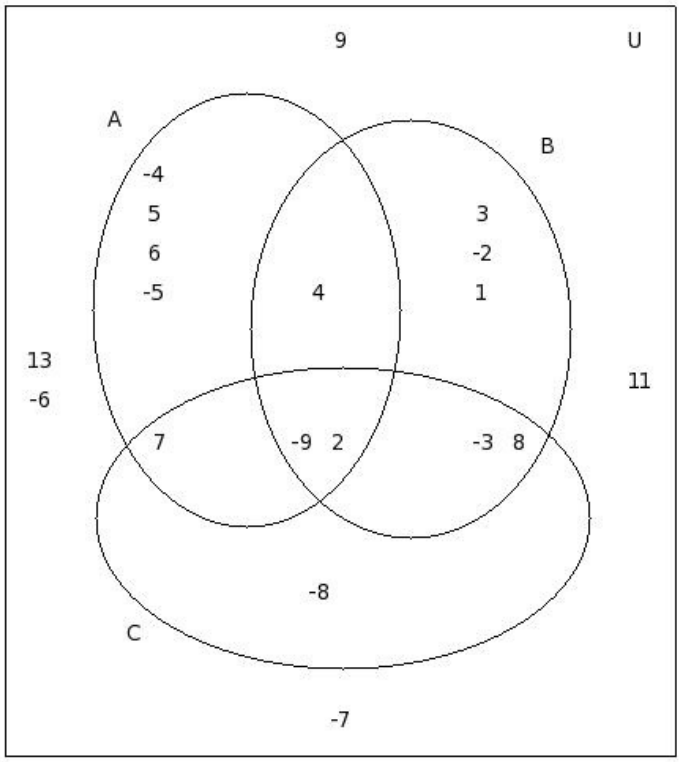
(i) 10 (ii) 7 (iii) 11 (iv) 9 (v) 12

21. A ∩ B =



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

22. Find n(C')

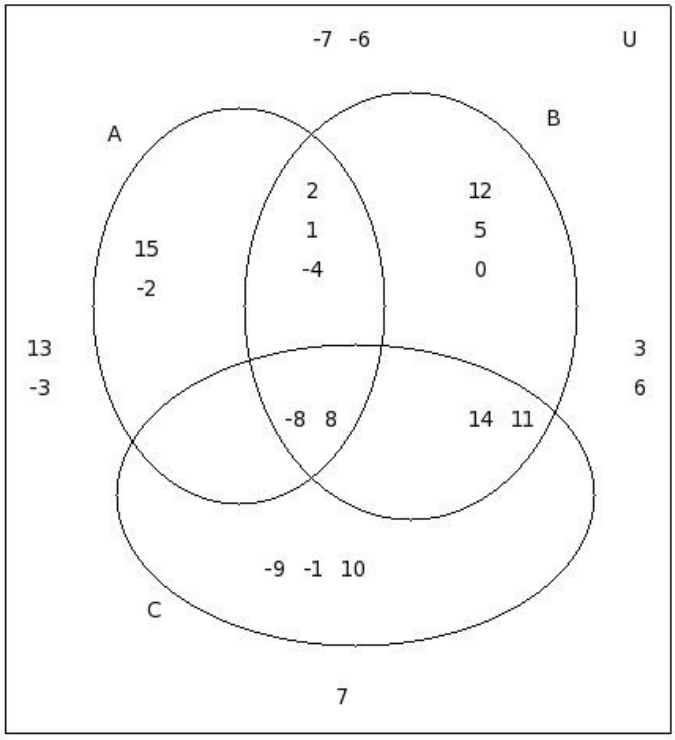


(i) 12 (ii) 14 (iii) 10 (iv) 15 (v) 13

23. In a class of 27 students, 5 students prefer 'School Van', 7 students prefer 'Scooter', 21 students prefer 'Moped', 2 students prefer 'School Van' and 'Scooter', 7 students prefer 'Scooter' and 'Moped', 4 students prefer 'Moped' and 'School Van', 2 students prefer all the three modes of transport. How many of them prefer only 'School Van'?

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

24. Find n(A ∩ (B ∪ C))



(i) 4 (ii) 6 (iii) 8 (iv) 5 (v) 2

25. In a class of 26 students, if 14 students prefer 'Scooter', 10 students prefer 'RTC Bus' and 7 students prefer both the modes of transport, how many prefer 'RTC Bus' only ?

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

Assignment Key

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