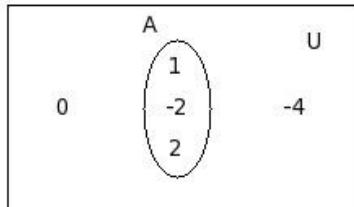




1. Which of the following symbols represent the set of Natural numbers ?

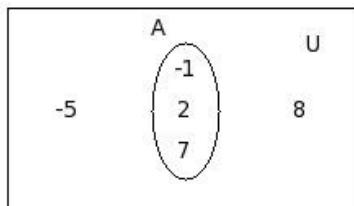
(i) N (ii) Q (iii) Z (iv) R (v) W

2. Find \emptyset



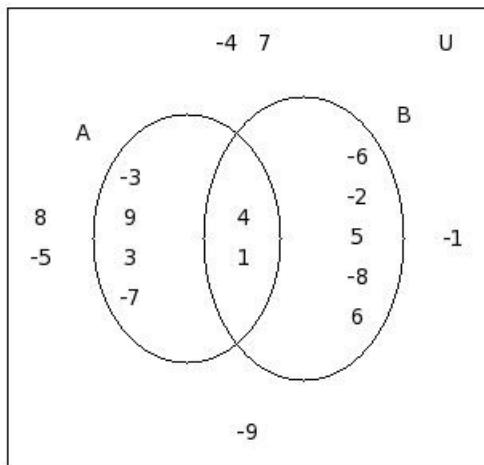
(i) {} (ii) {7} (iii) {2,7,1,4} (iv) {4} (v) {7,2}

3. Find $n(A)$



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

4. Find $A \cup B$



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

5. Which of the following is not equal to set $A = \{5,9,3,8,4,0,6\}$?

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

6. If $A = \{3,0,12,11,8,7\}$ and $B = \{14,12,11,6,15,7\}$, then $A - B =$

(i) {0,17,3,8} (ii) {0,8} (iii) {12,3,0,8} (iv) {14,15,6} (v) {0,8,3}

7. Which of the following is 'equivalent set' symbol?

(i) \leftrightarrow (ii) \subset (iii) \subseteq (iv) \cup (v) \notin

8. If $\mu = \{-8, -1, 4, -7, 6, 0, -2, 2, -5, 5, -4, 3, -6, 7\}$, $A = \{-8, -1, 4, -7, 6, 0\}$ and $B = \{-2, 6, 2, -5\}$, find $A - B$

(i) $\{-8, -7, 0, 5, 4\}$ (ii) $\{-7, -8, -1, 4, 0, -4\}$ (iii) $\{-8, -7, 0, -1\}$ (iv) $\{\}$ (v) $\{-7, 4, 0, -8, -1\}$

9. Which of the following is a null set?

(i) $\{-5, -4, 2, -2, 7\}$ (ii) $\{3, -5\}$ (iii) $\{\}$ (iv) $\{3, -4, 7\}$ (v) $\{9, -7, 1, -1\}$

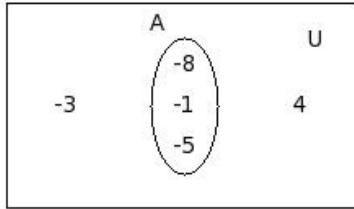
10. If $A = \{1, 2, 5\}$ and $B = \{4, 0, 3\}$, then $A \cup B =$

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

11. Which of the following elements does not belong to the set $\{x, r, h, u, f\}$

(i) h (ii) u (iii) y (iv) x (v) f

12. Find $n(A \cap A)$



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

13. Given sets A , B and C , where $A \subset B \subset C$, which of the following are true?

- a) $B \subset A$
- b) $\emptyset \subset B$
- c) $C \subset A$
- d) $C \supset B$
- e) $B \supset A$

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

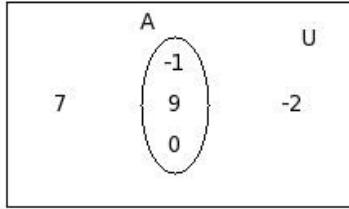
14. Which of the following is a singleton set?

(i) $\{3, -6, -8, -7, 9\}$ (ii) $\{-7\}$ (iii) $\{-1, -9, -3, -8\}$ (iv) $\{3, 1, -2\}$ (v) $\{2, 0\}$

15. Which of the following is a subset of $A = \{0\}$?

(i) $\{\}$ (ii) $\{2, 4, 1\}$ (iii) $\{2, 4\}$ (iv) $\{2\}$

16. Find $A \cap \emptyset$



(i) $\{9\}$ (ii) $\{5\}$ (iii) $\{\}$ (iv) $\{9, 0\}$ (v) $\{3, 0, 9, 4\}$

17. Which of the following is 'universal set' symbol?

(i) \notin (ii) μ (iii) \cup (iv) \in (v) \neq

18. Which of the following is 'belongs to' symbol?

(i) \notin (ii) \in (iii) \cap (iv) \subset (v) \neq

19. Which of the following is a null set?

- (i) $\{\emptyset\}$ (ii) $\{\text{empty}\}$ (iii) $\{0\}$ (iv) $\{0\}$ (v) \emptyset

20. Which of the following is equivalent set of $A = \{-2, 7, 2, -7, 9, 5\}$?

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

21. Which of the following is an infinite set?

- (i) $\{0, 1, 2, 3, 4, 5, 6, 7, 8, \dots\}$ (ii) $\{9, -8, -3\}$ (iii) $\{1\}$ (iv) $\{-6, -8\}$ (v) $\{\}$

22. If $A \subset B$, then which of the following are true?

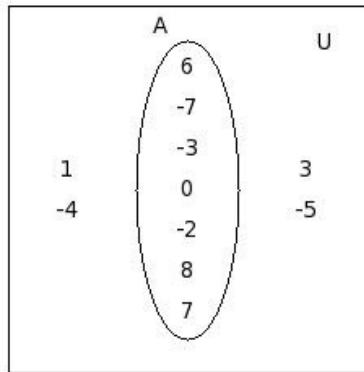
- a) $A' = B$
- b) $A' \subset B$
- c) $B \supset A$
- d) $B \subset A$
- e) $A = B$

- (i) $\{d, e, c\}$ (ii) $\{a, c\}$ (iii) $\{c\}$ (iv) $\{b, c\}$

23. Which of the following elements belong to the set $\{8, 7, 10, 4, 2\}$?

- (i) (-3) (ii) 15 (iii) 14 (iv) (-4) (v) 2

24. Find $A \cap A$



- (i) $\{-3, 6, -2, 8, 7, -7, 0\}$ (ii) $\{-4, -1, 12, 8, -8, 6\}$ (iii) $\{-1, 12, 8, -8, 6, 2, -4, 5\}$ (iv) $\{-2, -3, 6, 8, 0, 7\}$

- (v) $\{12, 8, 6, 0, -2, -3\}$

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

- (i) \subset (ii) \supset (iii) \neq (iv) \leftrightarrow (v) \notin

Assignment Key

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