

EduSahara™ Learning Center Assignment**Grade : Class VIII, ICSE****Chapter : Sets****Name : Operations on Sets****Licensed To : Teachers and Students for non-commercial use**

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

- (i) $\{1,3,4,2\}$ (ii) $\{4,3,6,2,1,0\}$ (iii) $\{2,4,0,6,1\}$
(iv) $\{2,1,0,3\}$ (v) $\{2,3,1,0,4\}$
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2. If $A = \{5,4,7,1,9\}$ and $B = \{3,5,8,10,7\}$, then $A \cup B =$

- (i) $\{4,1,7,10,8,3,9,5\}$ (ii) $\{5,7,4,8,11,10,1,9\}$
(iii) $\{3,8,9,10,4,5,7\}$ (iv) $\{4,9,3,1,5,8,10\}$
(v) $\{4,14,9,7,1,3,10,8,5\}$
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3. If $A = \{7,15,13,10,14\}$, $B = \{13,2,15,8,11\}$ and $C = \{15,12,1,9,10\}$, then
 $A \cup (B \cup C) =$

- (i) $\{\}$
(ii) $\{1,8,13,2,7,12,15,11,9,10\}$
(iii) $\{7,2,14,8,13,1,9,15,10,12,20,11\}$
(iv) $\{13,10,2,11,14,1,12,15,8,9,7\}$
(v) $\{10,9,14,1,13,7,2,12,8,15\}$
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4. If $A = \{10,6,3,7,2,14\}$, $B = \{10,14,6,1,11,15\}$ and $C = \{7,11,2,12,6,15\}$, then
 $A \cup (B \cup C) =$

- (i) $\{12,2,6,10,14,7,11,15,1\}$ (ii) $\{7,2,12,14,1,6,10,15,11,3\}$
(iii) $\{3,1,12,2,10,14,6,15,7,11,16\}$ (iv) $\{\}$
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5. If $A = \{2,3,10\}$ and $B = \{8,4,10\}$, then $A \cap B =$

- (i) $\{10,8\}$ (ii) $\{10\}$ (iii) $\{14,10\}$ (iv) $\{10,3,4\}$ (v) $\{2,10\}$
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6. If $A = \{5,8,3,1,7\}$ and $B = \{7,8,2,0,10\}$, then $A \cap B =$

- (i) $\{7,8,10\}$ (ii) $\{15,8,7\}$ (iii) $\{7,8\}$ (iv) $\{7,1,8\}$ (v) $\{10,2,7,8\}$
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7. If $A = \{7,13,12,10,11,5,6\}$ and $B = \{8,12,6,10,13,2,9\}$, then $A \cap B =$

- (i) $\{10,12,13,6\}$ (ii) $\{13,2,10,6,12\}$ (iii) $\{12,6,10,13,2,7\}$
(iv) $\{6,13,17,10,12\}$ (v) $\{12,13,6,10,5\}$
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8. If $A = \{1,0,4\}$ and $B = \{5,6,7\}$, then $B \cap A =$

- (i) $\{6\}$ (ii) $\{1\}$ (iii) $\{14\}$ (iv) $\{6,1\}$ (v) $\{\}$
-

9. If $A = \{7,6,4,8,5\}$ and $B = \{6,4,8,9,10\}$, then $B \cap A =$

- (i) $\{4,9,8,6\}$ (ii) $\{6,8,7,4\}$ (iii) $\{8,6,4\}$ (iv) $\{6,4,8,7,10\}$ (v) $\{13,6,4,8\}$
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10. If $A = \{13,11,9,4,5,6,1\}$ and $B = \{9,8,13,0,10,4,6\}$, then $B \cap A =$

- (i) $\{9,5,4,6,13,0\}$ (ii) $\{13,9,6,4\}$ (iii) $\{13,4,10,9,6\}$
(iv) $\{9,13,6,1,4\}$ (v) $\{9,6,13,18,4\}$
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11. If $A = \{11,9,5,12,6,1\}$, $B = \{12,9,15,11,10,14\}$ and $C = \{7,3,2,13,11,8\}$, then
 $A \cap (B \cap C) =$

- (i) $\{11\}$ (ii) $\{2,11\}$ (iii) $\{14,11\}$ (iv) $\{11,16\}$ (v) $\{11,6\}$
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12. If $A = \{3,1,0,8\}$ and $B = \{0,6,7,8\}$, then $A - B =$

- (i) $\{3,1,8\}$ (ii) $\{3,1\}$ (iii) $\{6,7\}$ (iv) $\{1\}$ (v) $\{11,1,3\}$
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13. If $A = \{6,13,2,11,4,10\}$ and $B = \{5,1,14,11,9,10\}$, then $A - B =$

- (i) $\{13,4,6,2\}$ (ii) $\{5,14,9,1\}$ (iii) $\{6,2,4,20,13\}$
(iv) $\{6,2,4\}$ (v) $\{6,13,10,4,2\}$
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14. If $A = \{10,5,4,6\}$ and $B = \{4,2,10,6\}$, then $B - A =$

- (i) $\{2\}$ (ii) $\{10,2\}$ (iii) $\{2,12\}$ (iv) $\{\}$
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15. If $A = \{7,10,9,12,2,6\}$ and $B = \{5,2,8,7,13,6\}$, then $B - A =$

- (i) $\{\}$ (ii) $\{13,8,5,19\}$ (iii) $\{5,8,13\}$ (iv) $\{13,8\}$ (v) $\{13,7,5,8\}$
-

16. The symmetric difference of set $A = \{11,6,0,10,13,5,1,7\}$
and set $B = \{11,13,6,15,8,9,2,7\}$ is

- (i) $\{8,10,2,1,0,6,5,9,15\}$ (ii) $\{10,0,5,1\}$
(iii) $\{2,5,9,10,8,15,1,0\}$ (iv) $\{2,9,8,15\}$
(v) $\{0,10,2,9,5,15,1\}$
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17. If $A = \{-2, 9, -5\}$ and $\mu = \{-2, 9, -5, -4, -9\}$,
find $A \cup A$
- (i) $\{9, -5, -1\}$ (ii) $\{-1, -2, 8\}$ (iii) $\{-5, -2, 9\}$ (iv) $\{5, -5, 4, 9, -2\}$ (v) $\{-2, -5\}$
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18. If $A = \{-3, -9, 3, -7, 4, 0, 9\}$ and $\mu = \{-3, -9, 3, -7, 4, 0, 9, -4, 6, -2, -5\}$,
find $A \cup \emptyset$
- (i) $\{-3, -9, 3, 9, 0, 4, 5, -7, 1\}$ (ii) $\{9, -1, -7, 3, 1, -9, 5\}$
(iii) $\{0, 4, -3, 9, 3, -9\}$ (iv) $\{3, 4, -7, 9, 0, -9, -3\}$
(v) $\{3, 7, 9, -3, -9, 0, -7\}$
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19. If $A = \{-5, -7, 3, 5\}$ and $\mu = \{-5, -7, 3, 5, 7, -9, -6\}$,
find $A \cup \mu$
- (i) $\{2, -2, -6, -7, 3, 7, -9\}$ (ii) $\{-5, -6, 5, -9, 3, 7\}$
(iii) $\{-6, -7, -5, 5, 9, -9, 3\}$ (iv) $\{-9, -7, -5, 5, -6, 3, 7\}$
(v) $\{-5, -9, 3, -6, -7, 2, 7, 1, 5\}$
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20. If $A = \{3, -8, 9\}$ and $\mu = \{3, -8, 9, 5, -9\}$,
find $A \cap A$
- (i) $\{3, -8, 5\}$ (ii) $\{3, 9, -8\}$ (iii) $\{9, 3\}$ (iv) $\{5, 9, -8\}$ (v) $\{-8, 4, 9, 3, 1\}$
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21. If $A = \{9, 0, -4, 4, 2\}$ and $\mu = \{9, 0, -4, 4, 2, 6, -1, -2\}$,
find $A \cap \emptyset$
- (i) $\{5\}$ (ii) $\{4, 0\}$ (iii) $\{0\}$ (iv) $\{4\}$ (v) $\{\}$
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22. If $A = \{-9, 4, 0, 9\}$ and $\mu = \{-9, 4, 0, 9, 6, 2, 1\}$,
find $A \cap \mu$
- (i) $\{3, -1, 9, -9\}$ (ii) $\{-9, 1, 9, 4\}$ (iii) $\{1, 4, 2, -9, 9, 0\}$
(iv) $\{4, 0, -9\}$ (v) $\{0, 9, -9, 4\}$
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23. If $A = \{-9, -3, 5, -8\}$ and $\mu = \{-9, -3, 5, -8, -2, -6, 4\}$,
find A'
- (i) $\{4, -2, -6\}$ (ii) $\{\}$ (iii) $\{-2, 7, -6\}$ (iv) $\{-2, 4\}$ (v) $\{4, -6, 1, -2, 3\}$
-

24. If $A = \{6, 3, 1, 5, 0\}$ and $\mu = \{6, 3, 1, 5, 0, -8, 4, -3\}$,
find $A \cup A'$

- (i) $\{1, -3, -8, -1, 6, 5, 2, 3, 0, 4\}$ (ii) $\{\}$
 (iii) $\{5, 3, -3, 4, 0, -8, 1, 6\}$ (iv) $\{-8, 0, 1, 5, -3, 6, 4\}$
 (v) $\{6, 1, -7, 4, 5, 3, -3, 0\}$
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25. If $A = \{2, 9, 4\}$ and $\mu = \{2, 9, 4, -6, -7\}$,
 find $A \cap A'$

- (i) $\{\}$ (ii) $\{1\}$ (iii) $\{3\}$ (iv) $\{-1\}$ (v) $\{2, 5\}$
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26. If $A = \{-7, -2, 1, 7, -8\}$ and $\mu = \{-7, -2, 1, 7, -8, 8, 5, -9\}$,
 find $(A')'$

- (i) $\{-7, 2, 7, -6, -8\}$ (ii) $\{3, 7, 1, -8, -7\}$ (iii) $\{-8, 1, 7, -7, -2\}$
 (iv) $\{7, -8, -2, 1\}$ (v) $\{-2, 3, -7, 1, 7, -1, -8\}$
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- If $\mu = \{-9, 3, 4, -7, -8, 6, -4, 0, 1, 8, 5, 2, -6, -1, -2, -3, 9\}$,
 27. $A = \{-9, 3, 4, -7, -8, 6\}$, $B = \{-4, 0, -9, 3, -8, 1\}$,
 $C = \{-7, 4, 8, 5, 2, 3\}$, find $A \cap B \cap C$

- (i) $\{-1\}$ (ii) $\{3\}$ (iii) $\{1\}$ (iv) $\{\}$ (v) $\{3, 1\}$
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- If $\mu = \{15, -8, 12, -2, -9, 6, -4, 16, -7, 13, 4, -3, 9, 11, 3, -6, 8, 14, -5, 1, 0, -1\}$,
 28. $A = \{15, -8, 12, -2, -9, 6, -4, 16, -7\}$, $B = \{-8, -2, 13, 4, -7, 6, -3, 9, 15\}$,
 $C = \{11, -8, 3, 12, -4, 9, -9, -6\}$, find $A \cup (B \cap C)$
- (i) $\{-4, 16, -9, 9, -8, 15, 6, 12, -2, -7, -3\}$ (ii) $\{-4, 16, -9, 9, -8, 15, 12, -2, -7\}$
 (iii) $\{-4, 16, -9, 9, -8, 15, 12, -2, -7, -3\}$ (iv) $\{-4, 16, -9, 9, 15, 6, 12, -2, -7\}$
 (v) $\{-4, 16, -9, 9, -8, 15, 6, 12, -2, -7\}$
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- If $\mu = \{15, -4, -9, 14, -2, -3, 6, 11, 5, 10, 8, 13, 2, 0, 1, -6, 3, 4, -1, -7, 16, 12, 7\}$,
 29. $A = \{15, -4, -9, 14, -2, -3, 6\}$, $B = \{11, 14, -2, -4, -9, 5, 10, 8, 13\}$,
 $C = \{2, 15, -3, 8, 0, 1, 6, 14, 10\}$, find $B \cup (C \cap A)$

- (i) $\{6, 14, -4, -2, -9, -3, 11, 15, 10, 5, 8\}$
 (ii) $\{6, 13, 14, -4, -2, -9, -3, 11, 10, 5, 8\}$
 (iii) $\{6, 13, 14, -4, -2, -9, -3, 11, 15, 10, 5, 8\}$
 (iv) $\{6, 13, 14, -4, -2, -9, -3, 11, 10, 5, 8, 1\}$
 (v) $\{6, 13, 14, -4, -2, -9, -3, 11, 15, 10, 5, 8, 1\}$
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- If $\mu = \{-8, 12, -4, -5, -2, 6, 13, 2, 4, 3, -9, -6, -7, 1, 16, 15, 10, 8, 0, 9, -3, 5, 17\}$,
 30. $A = \{-8, 12, -4, -5, -2, 6, 13\}$, $B = \{2, -4, 4, 6, 3, -9, 12, -6, -8, -2\}$,

$C = \{6, 13, -7, 1, 16, -5, 15, -9, 10\}$, find $C \cup (A \cap B)$

- (i) $\{6, 10, 1, -8, 12, -5, 13, 16, -9, -2, -7, 15\}$
 - (ii) $\{6, 10, 1, -8, -5, 13, 16, -9, -4, -2, -7, 15\}$
 - (iii) $\{6, 10, 1, -8, 12, -5, 13, 16, -9, -4, -2, -7, 15\}$
 - (iv) $\{6, 10, 1, -8, -5, 13, 16, -9, -4, -2, -7, 15, 17\}$
 - (v) $\{6, 10, 1, -8, 12, -5, 13, 16, -9, -4, -2, -7, 15, 17\}$
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If $\mu = \{-8, 6, 17, -9, 14, 9, 10, -1, -7, 5, -5, 13, -3, 15, 16, 11, -2, -4, 12, 8, -6, 2, 0, 7, 3\}$,

31. $A = \{-8, 6, 17, -9, 14, 9, 10, -1, -7\}$, $B = \{-7, 5, 17, -5, 13, -3, 15, 10, 16, 11\}$,

$C = \{17, -2, -7, 16, -4, 12, 8\}$, find $A \cap (B \cup C)$

- (i) $\{-7, 10\}$ (ii) $\{-7, 10, 17\}$ (iii) $\{-7, 10, -9\}$ (iv) $\{-7, 17\}$ (v) $\{-7, 10, 17, -9\}$
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If $\mu = \{-7, 0, 6, 3, 11, -9, 14, 12, -2, -4, 13, 9, 2, -1, -5, 1, -8, 8, -6, -3, 4\}$,

32. $A = \{-7, 0, 6, 3, 11, -9\}$, $B = \{14, -9, 12, -7, -2, -4, 3, 0\}$,

$C = \{13, -2, 11, 9, 2, 14, -1, -5, 1\}$, find $B \cap (C \cup A)$

- (i) $\{3, 0, 14, -7, -9, -2, 8\}$ (ii) $\{3, 0, 14, -7, -9, -2\}$ (iii) $\{3, 0, 14, -7, -2, -3\}$
 - (iv) $\{3, 0, -7, -9, -2, 8\}$ (v) $\{3, 0, -7, -9, -2\}$
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If $\mu = \{-8, 18, 13, 1, 0, 15, 14, -7, 10, 3, 16, -9, 8, 4, 11, -5, 6, 2, 7, -2, -3\}$,

33. $A = \{-8, 18, 13, 1, 0, 15, 14, -7, 10, 3\}$, $B = \{16, -9, 14, 8, 4, 0, 13, 11, -5\}$,

$C = \{-5, 13, 4, 6, 16, 1, -9, 3\}$, find $C \cap (A \cup B)$

- (i) $\{-9, 13, 4, 16, -5, 3\}$ (ii) $\{1, 13, 4, 16, -5, 3\}$
 - (iii) $\{1, -9, 13, 4, 16, -5, 3\}$ (iv) $\{-9, 13, 4, 16, -5, 3, 7\}$
 - (v) $\{1, -9, 13, 4, 16, -5, 3, 7\}$
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Assignment Key

- 1) (v)
- 2) (i)
- 3) (iv)
- 4) (ii)
- 5) (ii)
- 6) (iii)
- 7) (i)
- 8) (v)
- 9) (iii)
- 10) (ii)
- 11) (i)
- 12) (ii)
- 13) (i)
- 14) (i)
- 15) (iii)
- 16) (iii)
- 17) (iii)
- 18) (iv)
- 19) (iv)
- 20) (ii)
- 21) (v)
- 22) (v)
- 23) (i)
- 24) (iii)
- 25) (i)
- 26) (iii)
- 27) (ii)
- 28) (v)
- 29) (iii)
- 30) (iii)
- 31) (ii)
- 32) (ii)
- 33) (iii)