Set Operation Worksheet – 2

1. If P = {a, b, c, d, e, f, g, h} Q = {c, d, e, i, k, l, m, n} R = {a, f, k, l, v, w}, then find P U Q.

a) {a, b, c, d, e, f, g, h, c, d, e, i, k, m, n}

b) {c, d, e}

c) {a, b, c, d, e, f, g, h, i, k, l, m, n}

d) ϕ

2. If P = {a, b, c, d, e, f} Q = {c, d, k, l, m, n} R = {a, f, k, l, v, w}, then find Q ⋂ R.

a) {k, l}

b) {c, d, k, l, m, n}

c) {a, f, k, l, v, w}

d) None of these

3. If P = {a, b, c, d, e, f, g, h} Q = {c, d, e, i, k, l, m, n} R = {a, f, k, l, v, w}, then find P U Q.

a) {a, b, c, d, e, f, g, h}

b) {a, b, c, d, e, f, g, h, i, k, l, m, n}

c) {c, d, e, i, k, l, m, n}

d) {c, d, e}

4. If P = {a, b, c, d, e, f, g, h} Q = {c, d, e, i, m, n} R = {a, f, k, l, v, w}, then find Q ⋂ R.

a) {c, d, e, i, m, n}

b) {a, f, k, l, v, w}

c) { }

d) {c, d, e, i, m, n, a, f, k, l, v, w}

5. If P = {a, b, c, d, e, f, g, h} Q = {c, d, e, i, k, l, m, n} R = {a, f, k , l, v, w}, then find P ⋂ R.

a) {a, f}

b) {a, b, c, d, e, f, g, h, k, l, v, w}

c) {a, f, k, l, v, w}

d) None of these

6. If P = {a, b, c, d, e, f} Q = {c, d, e, i, k, l, m, n} R = {a, f, k, l}, then find P U R.

a) {a, f, k, l}

b) {a, b, c, d, e, f, k, l}

c) {a, f}

d) {a, b, c, d, e, f}

7. Find P’ when Universe set (U) = {x|x ∈ N, X ≤ 10}, P = {1, 2, 4, 6}.

a) {3, 5, 7, 8, 9, 10}

b) {1, 2, 4, 6}

c) { }

d) {1, 2, 4, 6, 7, 8}

8. If universe set U = {10, 20, 30, 40, 50, 60, 70, 80, 90} P = {10, 20, 30, 40, 50, 60}

Q = {40, 60, 80, 90}, then find Q'.

a) {10, 20, 30, 40, 50, 60, 70, 80, 90}

b) {10, 20, 30, 50, 70}

c) {40, 60, 80, 90}

d) $\oint$

9. If universe set U = {10, 20, 30, 40, 50, 60, 70, 80, 90} P = {10, 20, 30, 40, 50, 60}

Q = {40, 60, 80, 90}, then find Q – P.

a) {10, 20, 30, 40, 50, 60}

b) {40, 60, 80, 90}

c) {80, 90}

d) None of these

10. If universe set U = {10, 20, 30, 40, 50, 60, 70, 80, 90} P = {10, 20, 30, 40, 50, 60}

Q = {40, 60, 80, 90}, then find P U Q.

a) {10, 20, 30, 40, 50, 60, 80, 90}

b) {10, 20, 30, 40, 50, 60}

c) {40, 60, 80, 90}

d) None of these

11. If universe set U = {10, 20, 30, 40, 50, 60, 70, 80, 90} P = {10, 20, 30, 40, 50, 60}

Q = {40,60,80,90}, then find P' U Q'.

a) {10, 20, 30, 50, 70, 80, 90}

b) {10, 20, 30, 40, 50, 60}

c) {40, 60, 80, 90}

d) $\oint$

12. If universe set U = {10, 20, 30, 40, 50, 60, 70, 80, 90}, P = {10, 20, 30, 40, 50, 60}

Q = {40,60,80,90}, then find P ⋂ Q.

a) {40, 60, 80, 90}

b) {10, 20, 30, 40, 50, 60}

c) {40, 60}

d) None of these

13. If universe set U = {10, 20, 30, 40, 50, 60, 70, 80, 90}, P = {10, 20, 30, 40, 50, 60}

Q = {40, 60, 80, 90}, then find (P⋂Q)'.

a) {40,60}

b) {10, 20, 30, 50, 80, 90}

c) {10, 20, 30, 40, 50, 60}

d) {40, 60, 80, 90}

14. If universe set U = {10, 20, 30, 40, 50, 60, 70, 80, 90}, P = {10, 20, 30, 40, 50, 60}

Q = {40, 60, 80, 90}, then find P – Q.

a) {10, 20, 30, 50}

b) {10, 20, 30, 40, 50, 60}

c) {40, 60, 80, 90}

d) None of these

15. If universe set U = {10, 20, 30, 40, 50, 60, 70, 80, 90}, P = {10, 20, 30, 40, 50, 60}

Q = {40, 60, 80, 90}, then find p'.

a) {70, 80, 90}

b) {10, 20, 30, 40, 50, 60}

c) {40, 60, 80, 90}

d) {10, 20, 30, 40, 50, 60, 70, 80, 90}

16. If n(P – Q) = 15, n(Q – P) = 20 and n(P ⋂ Q) = 5, find n(P) =?

a) 30

b) 20

c) 40

d) 60

17. If n(P – Q) = 15, n(Q – P) = 20 and n(P ⋂ Q) = 5, find n(Q) = ?

a) 25

b) 30

c) 50

d) 35

18. If n(P – Q) = 15, n(Q – P) = 20 and n(P ⋂ Q) = 5, find n(P U Q) = ?

a) 45

b) 50

c) 55

d) 40

19. n(U) = 30, n(P') = 15, and n(P ⋂ Q)' = 20 and n(Q) = 15 , find n(P U Q) = ?

a) 30

b) 35

c) 15

d) 40

20. n(U) = 30, n(P') = 15, and n(P ⋂ Q)'= 20 and n(Q) = 15, find n(Q – P) = ?

a) 5

b) 15

c) 20

d) 25