

Question 1: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	0	1	1
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
0	0	1	0	0	0
0	0	1	0	0	1
0	0	1	0	1	0
0	0	1	0	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	0	0	1
0	1	0	0	1	0
0	1	0	0	1	1
0	1	0	1	0	0
0	1	0	1	0	1
0	1	0	1	1	0
0	1	0	1	1	1
0	1	1	0	0	0
0	1	1	0	0	1
0	1	1	0	1	0
0	1	1	0	1	1
0	1	1	1	0	0
0	1	1	1	0	1
0	1	1	1	1	0
0	1	1	1	1	1
1	0	0	0	0	0
1	0	0	0	0	1
1	0	0	0	1	0
1	0	0	0	1	1
1	0	0	1	0	0
1	0	0	1	0	1
1	0	0	1	1	0
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	0	0	1
1	0	1	0	1	0
1	0	1	0	1	1
1	0	1	1	0	0
1	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	1
1	1	0	0	0	0
1	1	0	0	0	1
1	1	0	0	1	0
1	1	0	0	1	1
1	1	0	1	0	0
1	1	0	1	0	1
1	1	0	1	1	0
1	1	0	1	1	1
1	1	1	0	0	0
1	1	1	0	0	1
1	1	1	0	1	0
1	1	1	0	1	1
1	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	1	0
1	1	1	1	1	1

Option 1: (((E) and (not (C))) and (not (D))) and (not (D))

Option 2: (((D) or (C)) and (A)) and (D)

Option 3: (B) and (D)

Option 4: (A) or (not (B))

Correct Answer: (A) or (not (B))

Question 2: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	0	1	1
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
0	0	1	0	0	0
0	0	1	0	0	1
0	0	1	0	1	0
0	0	1	0	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	0	0	1
0	1	0	0	1	0
0	1	0	0	1	1
0	1	0	1	0	0
0	1	0	1	0	1
0	1	0	1	1	0
0	1	0	1	1	1
0	1	1	0	0	0
0	1	1	0	0	1
0	1	1	0	1	0
0	1	1	0	1	1
0	1	1	1	0	0
0	1	1	1	0	1
0	1	1	1	1	0
0	1	1	1	1	1
1	0	0	0	0	0
1	0	0	0	0	1
1	0	0	0	1	0
1	0	0	0	1	1
1	0	0	1	0	0
1	0	0	1	0	1
1	0	0	1	1	0
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	0	0	1
1	0	1	0	1	0
1	0	1	0	1	1
1	0	1	1	0	0
1	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	1
1	1	0	0	0	0
1	1	0	0	0	1
1	1	0	0	1	0
1	1	0	0	1	1
1	1	0	1	0	0
1	1	0	1	0	1
1	1	0	1	1	0
1	1	0	1	1	1
1	1	1	0	0	0
1	1	1	0	0	1
1	1	1	0	1	0
1	1	1	0	1	1
1	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	1	0
1	1	1	1	1	1

Option 1: $(B) \text{ or } (\text{not } (A))$

Option 2: $((D) \text{ and } (E)) \text{ and } (\text{not } (E)) \text{ or } (\text{not } (D))$

Option 3: $((E) \text{ and } (\text{not } (B))) \text{ and } (\text{not } (E)) \text{ or } (A)$

Option 4: $((D) \text{ and } (A)) \text{ or } (\text{not } (E))$

Correct Answer: $((D) \text{ and } (E)) \text{ and } (\text{not } (E)) \text{ or } (\text{not } (D))$

Question 3: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	0	1	1
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
0	0	1	0	0	0
0	0	1	0	0	1
0	0	1	0	1	0
0	0	1	0	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	0	0	1
0	1	0	0	1	0
0	1	0	0	1	1
0	1	0	1	0	0
0	1	0	1	0	1
0	1	0	1	1	0
0	1	0	1	1	1
0	1	1	0	0	0
0	1	1	0	0	1
0	1	1	0	1	0
0	1	1	0	1	1
0	1	1	1	0	0
0	1	1	1	0	1
0	1	1	1	1	0
0	1	1	1	1	1
1	0	0	0	0	0
1	0	0	0	0	1
1	0	0	0	1	0
1	0	0	0	1	1
1	0	0	1	0	0
1	0	0	1	0	1
1	0	0	1	1	0
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	0	0	1
1	0	1	0	1	0
1	0	1	0	1	1
1	0	1	1	0	0
1	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	1
1	1	0	0	0	0
1	1	0	0	0	1
1	1	0	0	1	0
1	1	0	0	1	1
1	1	0	1	0	0
1	1	0	1	0	1
1	1	0	1	1	0
1	1	0	1	1	1
1	1	1	0	0	0
1	1	1	0	0	1
1	1	1	0	1	0
1	1	1	0	1	1
1	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	1	0
1	1	1	1	1	1

Option 1: $((C) \text{ or } (\text{not } (D))) \text{ and } (C)$

Option 2: $((C) \text{ and } (E)) \text{ and } (\text{not } (A))$

Option 3: $(E) \text{ and } (A)$

Option 4: $((E) \text{ or } (D)) \text{ or } (\text{not } (E)) \text{ or } (B)$

Correct Answer: $((E) \text{ or } (D)) \text{ or } (\text{not } (E)) \text{ or } (B)$

Question 4: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	0	1	1
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
0	0	1	0	0	0
0	0	1	0	0	1
0	0	1	0	1	0
0	0	1	0	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	0	0	1
0	1	0	0	1	0
0	1	0	0	1	1
0	1	0	1	0	0
0	1	0	1	0	1
0	1	0	1	1	0
0	1	0	1	1	1
0	1	1	0	0	0
0	1	1	0	0	1
0	1	1	0	1	0
0	1	1	0	1	1
0	1	1	1	0	0
0	1	1	1	0	1
0	1	1	1	1	0
0	1	1	1	1	1
1	0	0	0	0	0
1	0	0	0	0	1
1	0	0	0	1	0
1	0	0	0	1	1
1	0	0	1	0	0
1	0	0	1	0	1
1	0	0	1	1	0
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	0	0	1
1	0	1	0	1	0
1	0	1	0	1	1
1	0	1	1	0	0
1	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	1
1	1	0	0	0	0
1	1	0	0	0	1
1	1	0	0	1	0
1	1	0	0	1	1
1	1	0	1	0	0
1	1	0	1	0	1
1	1	0	1	1	0
1	1	0	1	1	1
1	1	1	0	0	0
1	1	1	0	0	1
1	1	1	0	1	0
1	1	1	0	1	1
1	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	1	0
1	1	1	1	1	1

Option 1: $((A) \text{ and } (E)) \text{ and } (A)$

Option 2: $((((E) \text{ or } (\text{not } (A))) \text{ and } (\text{not } (C))) \text{ and } (\text{not } (C)))$

Option 3: $(D) \text{ and } (B)$

Option 4: $((((E) \text{ or } (\text{not } (C))) \text{ or } (\text{not } (E))) \text{ or } (\text{not } (D)))$

Correct Answer: $((((E) \text{ or } (\text{not } (A))) \text{ and } (\text{not } (C))) \text{ and } (\text{not } (C)))$

Question 5: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	0	1	1
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
0	0	1	0	0	0
0	0	1	0	0	1
0	0	1	0	1	0
0	0	1	0	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	0	0	1
0	1	0	0	1	0
0	1	0	0	1	1
0	1	0	1	0	0
0	1	0	1	0	1
0	1	0	1	1	0
0	1	0	1	1	1
0	1	1	0	0	0
0	1	1	0	0	1
0	1	1	0	1	0
0	1	1	0	1	1
0	1	1	1	0	0
0	1	1	1	0	1
0	1	1	1	1	0
0	1	1	1	1	1
1	0	0	0	0	0
1	0	0	0	0	1
1	0	0	0	1	0
1	0	0	0	1	1
1	0	0	1	0	0
1	0	0	1	0	1
1	0	0	1	1	0
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	0	0	1
1	0	1	0	1	0
1	0	1	0	1	1
1	0	1	1	0	0
1	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	1
1	1	0	0	0	0
1	1	0	0	0	1
1	1	0	0	1	0
1	1	0	0	1	1
1	1	0	1	0	0
1	1	0	1	0	1
1	1	0	1	1	0
1	1	0	1	1	1
1	1	1	0	0	0
1	1	1	0	0	1
1	1	1	0	1	0
1	1	1	0	1	1
1	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	1	0
1	1	1	1	1	1

Option 1: ((B) or (not (E))) and (not (D))

Option 2: (E) and (E)

Option 3: ((A) and (not (C))) or (E)

Option 4: (A) and (not (A))

Correct Answer: ((B) or (not (E))) and (not (D))

Question 6: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	0	1	1
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
0	0	1	0	0	0
0	0	1	0	0	1
0	0	1	0	1	0
0	0	1	0	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	0	0	1
0	1	0	0	1	0
0	1	0	0	1	1
0	1	0	1	0	0
0	1	0	1	0	1
0	1	0	1	1	0
0	1	0	1	1	1
0	1	1	0	0	0
0	1	1	0	0	1
0	1	1	0	1	0
0	1	1	0	1	1
0	1	1	1	0	0
0	1	1	1	0	1
0	1	1	1	1	0
0	1	1	1	1	1
1	0	0	0	0	0
1	0	0	0	0	1
1	0	0	0	1	0
1	0	0	0	1	1
1	0	0	1	0	0
1	0	0	1	0	1
1	0	0	1	1	0
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	0	0	1
1	0	1	0	1	0
1	0	1	0	1	1
1	0	1	1	0	0
1	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	1
1	1	0	0	0	0
1	1	0	0	0	1
1	1	0	0	1	0
1	1	0	0	1	1
1	1	0	1	0	0
1	1	0	1	0	1
1	1	0	1	1	0
1	1	0	1	1	1
1	1	1	0	0	0
1	1	1	0	0	1
1	1	1	0	1	0
1	1	1	0	1	1
1	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	1	0
1	1	1	1	1	1

Option 1: $((A) \text{ and } (\text{not } (B))) \text{ or } (A)$

Option 2: $((E) \text{ or } (\text{not } (D))) \text{ and } (\text{not } (E))$

Option 3: $(A) \text{ and } (\text{not } (C))$

Option 4: $((E) \text{ and } (C)) \text{ and } (D)$

Correct Answer: $((E) \text{ or } (\text{not } (D))) \text{ and } (\text{not } (E))$

Question 7: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	0	1	1
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
0	0	1	0	0	0
0	0	1	0	0	1
0	0	1	0	1	0
0	0	1	0	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	0	0	1
0	1	0	0	1	0
0	1	0	0	1	1
0	1	0	1	0	0
0	1	0	1	0	1
0	1	0	1	1	0
0	1	0	1	1	1
0	1	1	0	0	0
0	1	1	0	0	1
0	1	1	0	1	0
0	1	1	0	1	1
0	1	1	1	0	0
0	1	1	1	0	1
0	1	1	1	1	0
0	1	1	1	1	1
1	0	0	0	0	0
1	0	0	0	0	1
1	0	0	0	1	0
1	0	0	0	1	1
1	0	0	1	0	0
1	0	0	1	0	1
1	0	0	1	1	0
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	0	0	1
1	0	1	0	1	0
1	0	1	0	1	1
1	0	1	1	0	0
1	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	1
1	1	0	0	0	0
1	1	0	0	0	1
1	1	0	0	1	0
1	1	0	0	1	1
1	1	0	1	0	0
1	1	0	1	0	1
1	1	0	1	1	0
1	1	0	1	1	1
1	1	1	0	0	0
1	1	1	0	0	1
1	1	1	0	1	0
1	1	1	0	1	1
1	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	1	0
1	1	1	1	1	1

Option 1: (E) and (A)

Option 2: ((B) or (E)) or (D)

Option 3: ((A) or (D)) and (not (E))

Option 4: ((A) or (D)) and (not (D))

Correct Answer: ((B) or (E)) or (D)

Question 8: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	0	1	1
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
0	0	1	0	0	0
0	0	1	0	0	1
0	0	1	0	1	0
0	0	1	0	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	0	0	1
0	1	0	0	1	0
0	1	0	0	1	1
0	1	0	1	0	0
0	1	0	1	0	1
0	1	0	1	1	0
0	1	0	1	1	1
0	1	1	0	0	0
0	1	1	0	0	1
0	1	1	0	1	0
0	1	1	0	1	1
0	1	1	1	0	0
0	1	1	1	0	1
0	1	1	1	1	0
0	1	1	1	1	1
1	0	0	0	0	0
1	0	0	0	0	1
1	0	0	0	1	0
1	0	0	0	1	1
1	0	0	1	0	0
1	0	0	1	0	1
1	0	0	1	1	0
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	0	0	1
1	0	1	0	1	0
1	0	1	0	1	1
1	0	1	1	0	0
1	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	1
1	1	0	0	0	0
1	1	0	0	0	1
1	1	0	0	1	0
1	1	0	0	1	1
1	1	0	1	0	0
1	1	0	1	0	1
1	1	0	1	1	0
1	1	0	1	1	1
1	1	1	0	0	0
1	1	1	0	0	1
1	1	1	0	1	0
1	1	1	0	1	1
1	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	1	0
1	1	1	1	1	1

Option 1: (C) and (B)

Option 2: (E) and (A)

Option 3: (((B) and (E)) or (not (E))) and (B)

Option 4: (C) and (not (C))

Correct Answer: (E) and (A)

Question 9: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	1	0	0
0	0	0	1	1	0
0	0	1	0	0	0
0	0	1	0	1	0
0	0	1	1	0	0
0	0	1	1	1	0
0	1	0	0	0	0
0	1	0	0	1	0
0	1	0	1	0	0
0	1	0	1	1	0
0	1	1	0	0	0
0	1	1	0	1	0
0	1	1	1	0	0
0	1	1	1	1	0
1	0	0	0	0	0
1	0	0	0	1	0
1	0	0	1	0	0
1	0	0	1	1	0
1	0	1	0	0	0
1	0	1	0	1	0
1	0	1	1	0	0
1	0	1	1	1	0
1	1	0	0	0	0
1	1	0	0	1	0
1	1	0	1	0	0
1	1	0	1	1	0
1	1	1	0	0	0
1	1	1	0	1	0
1	1	1	1	0	0
1	1	1	1	1	0

Option 1: ((C) and (D)) or (not (C))

Option 2: ((A) or (C)) and (E)

Option 3: (E) and (not (B))

Option 4: (A) and (D)

Correct Answer: (E) and (not (B))

Question 10: Which expression corresponds to the given truth table?

Truth Table:

A	B	C	D	E	F
0	0	0	0	0	0
0	0	0	0	0	1
0	0	0	0	1	0
0	0	0	0	1	1
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
0	0	1	0	0	0
0	0	1	0	0	1
0	0	1	0	1	0
0	0	1	0	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	0	0	1
0	1	0	0	1	0
0	1	0	0	1	1
0	1	0	1	0	0
0	1	0	1	0	1
0	1	0	1	1	0
0	1	0	1	1	1
0	1	1	0	0	0
0	1	1	0	0	1
0	1	1	0	1	0
0	1	1	0	1	1
0	1	1	1	0	0
0	1	1	1	0	1
0	1	1	1	1	0
0	1	1	1	1	1
1	0	0	0	0	0
1	0	0	0	0	1
1	0	0	0	1	0
1	0	0	0	1	1
1	0	0	1	0	0
1	0	0	1	0	1
1	0	0	1	1	0
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	0	0	1
1	0	1	0	1	0
1	0	1	0	1	1
1	0	1	1	0	0
1	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	1
1	1	0	0	0	0
1	1	0	0	0	1
1	1	0	0	1	0
1	1	0	0	1	1
1	1	0	1	0	0
1	1	0	1	0	1
1	1	0	1	1	0
1	1	0	1	1	1
1	1	1	0	0	0
1	1	1	0	0	1
1	1	1	0	1	0
1	1	1	0	1	1
1	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	1	0
1	1	1	1	1	1

Option 1: $((A \text{ or } (\text{not } C))) \text{ and } (A)$

Option 2: $((E \text{ and } (\text{not } A))) \text{ and } (\text{not } C)$

Option 3: $((A \text{ and } D) \text{ or } E) \text{ and } (\text{not } B)$

Option 4: $((C \text{ or } B) \text{ or } (\text{not } A)) \text{ or } C$

Correct Answer: $((C \text{ or } B) \text{ or } (\text{not } A)) \text{ or } C$