Binary, Truth Table, and Conditional Practice

Binary

Convert the Following From Binary (Base 2) to Decimal (Base 10).

1. 110001
2. 1001110
3. 100101
4. 111010
5. 1000011
6. 100
7. 10100
8. 11111
9. 1011000
10. 101000

Convert the Following From Decimal (Base 10) to Binary (Base 2).

1. 78
2. 67
3. 20
4. 40
5. 58
6. 88
7. 37
8. 49
9. 4
10. 31

Truth Tables

Generate Truth Tables for the Following

1. NOT (A ∨ B)
2. (C ∨ B) ∧ ((C ∧ A) ∨ B)
3. NOT(NOT(NOT(A ∨ B)))
4. A ∧ B ∧ C
5. B ∨ B ∧ NOT(A ∧ C)

Conditional Practice

Evaluate the Following Expressions

Given:

```
isFlat  = True
isRound = False
```

```
isRed   = True
```

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1. (isFlat || isRound) && (isRed && isFlat)
2. (isRound || (isRed == isFlat))
3. !(isRound && isFlat && isRed)
4. ((isRound != isRed) == isFlat) && True)
5. (((isRed == isRound) || True) || False)
6. (!(True && True && True))