Octal into Binary

Use Table

Binary into Octal

HexaDecimal into Binary

Use Table

Binary into Hexadecimal

Decimal into other bases

Decimal → Binary

Decimal → Octal

Decimal → Hexadecimal

Octal into Hexadecimal

Octal → Binary → Hex

Hexadecimal into Octal

Hex → Binary → Octal

Other Bases into Decimal

Binary → Decimal

Octal → Decimal

Hexadecimal → Decimal

Binary into Decimal

Q:1) Convert $(1011)_2$ = ( ) $_{10}$

Q:2) Convert $(.101)_2$ = ( ) $_{10}$

Ans

Whole number

1 0 1 1

$1 * 2^3 + 0 * 2^2 + 1 * 2^1 + 1 * 2^0$

8 + 0 + 2 + 1

Answer 11

Fractional Number

. 1 0 1

$1 * 2^{-1} + 1 * 2^{-2} + 1 * 2^{-3}$

1/2 + 0 + 1/8

Answer .625

Answer

Q:3) Convert $(1011.101)_2$ = Q:1 & Q:2

$(1011.101)_2 = (\ 11.625\ )_{10}$

Octal into Binary

Use Table

Binary into Octal

HexaDecimal into Binary

Use Table

Binary into Hexadecimal

Octal into Hexadecimal

Octal → Binary → Hex

Hexadecimal into Octal

Hex → Binary → Octal

Decimal into other bases

Decimal → Binary

Decimal → Octal

Decimal → Hexadecimal

Other Bases into Decimal

Binary → Decimal

Octal → Decimal

Hexadecimal → Decimal

Octal into Decimal

Q:1) Convert $(106)_8$ = ( ) 10

Q:2) Convert $(.32)_8$ = ( ) 10

Ans

Whole Number

1 0 6

$1 * 8^2 + 0 * 8^1 + 6 * 8^0$

64 + 0 + 6

Answer 70

Fractional Number

. 3 2

$3 * 8^{-1} + 2 * 8^{-2}$

3/8 + 2/64

Answer .40625

Answer

Q:3) Convert (106.32)8 = ( ) 10= Q:1 & Q:2

$(106.32)_8 = (70.40625)_{10}$

Octal into Binary

Use Table

Binary into Octal

HexaDecimal into Binary

Use Table

Binary into Hexadecimal

Octal into Hexadecimal

Octal → Binary → Hex

Hexadecimal into Octal

Hex → Binary → Octal

Decimal into other bases

Decimal → Binary

Decimal → Octal

Decimal → Hexadecimal

Other Bases into Decimal

Binary → Decimal

Octal → Decimal

Hexadecimal → Decimal

Conversion from Hexadecimal into Decimal

Q:1) Convert $(13A)_{16}$ = ( ) 10

Q:2) Convert $(.B8)_{16}$ = ( ) 10

Ans

Whole Number

1 3 A

$1 * 16^2$ + $3 * 16^1$ + $A(10) * 16^0$

256 + 48 + 10

Answer 314

Fractional Number

. B 8

$B(11) * 16^{-1}$ + $8 * 16^{-2}$

11/16 + 8/256

Answer .71875

Answer

Q:3) Convert $(13A.B8)_{16}$ = ( ) 10 = Combine Q:1 & Q:2

$(13A.B8)_{16} = (314.71875)_{10}$

Octal into Binary

Use Table

Binary into Octal

HexaDecimal into Binary

Use Table

Binary into Hexadecimal

Octal into Hexadecimal

Octal → Binary → Hex

Hexadecimal into Octal

Hex → Binary → Octal

Decimal into other bases

Decimal → Binary

Decimal → Octal

Decimal → Hexadecimal

Other Bases into Decimal

Binary → Decimal

Octal → Decimal

Hexadecimal → Decimal

Thank YOU !!