$$8+9+\frac{1}{2}+\frac{1}{8}=12+0.5+0.725=72.625$$

HOW To convert decimal to binary

$$75 - 69 = 77$$
 $11 - 8 = 3$

FMSD method:
$$| 75 = 69 + 8 + 2 + 7$$
 $| 75 - 69 = 77$
 $| 75 = 69 + 8 + 2 + 7$
 $| 11 - 8 = 3$
 $| 5 = 2$
 $| 2^3 = 2^4 = 2^0$
 $| 3 - 24 = 11$
 $| 5 = 1001017$

$$339 = ?$$
 [256] 12369 3269 34210
 $339 - 256 = 89$ 1 0 1 0 1 0 0 1 0

$$1 \div 2 = 0 + [1] < (ns0)$$

How to convert decimal to Hexadecimal

1001011

10 based 10
Decimal is a system. (0,1,2,6,9,9,5,6,7,819)

Hexadecimal is a based 16 system

EX:

$$479 \rightarrow 10f_{16}$$
 $479 \div 16 = 29 + 75 \rightarrow 7$
 $29 \div 16 = 1 + 73 \rightarrow 0$
 $14259 \rightarrow 16 = 891 + 71 \rightarrow 3$
 $14259 \div 16 = 891 + 71 \rightarrow 3$
 $14259 \div 16 = 891 + 71 \rightarrow 7$
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 $14259 \div 16 = 891 + 71 \rightarrow 7$

 $(2 \times 16^{2}) + (3 \times 16^{2})^{2} + (74 \times 16^{0}) = 572 + 48 + 74 = 574$ Mit CamScanner gescannt

$$F = 70$$

$$\int_{16^{2}}^{1} \int_{16^{7}}^{1} \int_{16^{9}}^{1} (16^{9} \times 13) = 3890 + 125 = 3965$$

$$(16^{2} \times 15) + (16^{7} \times 7) + (16^{9} \times 13) = 3890 + 125 = 3965$$

$$(16^{2} \times 3) + (16^{1} \times 11) + (16^{1} \times 4) + (16^{1} \times 12) + (16^{1} \times 8)$$

convert Hexadecimal to bihary

How to convert binary to Hexadecimal

Decimal to octal conversion



decimal
$$\longrightarrow octal$$

$$394 \longrightarrow 9 = 76128$$

$$394 \div 8 = 49 R2$$
 $49 \div 8 = 6 R7 612$
 $5 \div 8 = 0 R5$

ootal to decimal conversion

$$\frac{(3\times8^{2})+(8^{1}\times7)+(8^{0}\times0)}{56}=298_{10}$$

$$(8^{2} \times 9) + (8 \times 2) + (5 \times 7) + (2 \times \frac{7}{8}) + (8 \times \frac{7}{64})$$

$$= (277.375)$$

Binary to Octal conversion

$$(9+2)(4+1)$$

(7)

Hexadeeimal To octal conversion



Hex —) octal

AC —> 8 8

10 12

10 12

$$8^{4} \stackrel{?}{=} 17$$
 $1010 \quad 1 \quad 100$
 $1010 \quad 101 \quad 100$

Decimal to BCD (Binary coded Decimal)

356 —> (8) BCD = 0 0 11 0 10 10 10

3 5 6 8427 8427 8427

(0011) [0101] [0110]

Mit CamScanner gescannt

9

$$-6 \rightarrow ?Biharg 5 | 10$$

8 a 2 1 7 Sign |
6 -> 0 1 1 0 manidade

-6-> 1 | 0

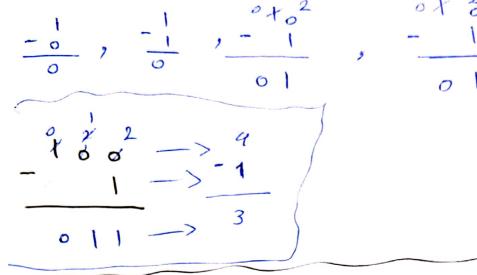
ASCII: American Standard code for information interchange, is acharacter encoding based on the English alphabet. id carently defines codes for 128 characters, 33 are non-printing smostly obsided e control characters that a fleet how text is processed, and 95 are printable characters.

RBC (The reflected binary code) = Gray code: is an ordering of the binary numeral System such that two successive values different only one bit, (they distingtion only one bit, (they distingtion)

$$\frac{1}{0}$$
, $\frac{1}{0}$, $\frac{1}{10}$, $\frac{1}{11}$.

$$\begin{array}{c}
0 \mid 0 \mid 0 & \longrightarrow 10 \\
+ \mid 0 \mid 0 \mid \longrightarrow 2
\end{array}$$

$$\begin{array}{c}
100 \mid 1 & \longrightarrow 19
\end{array}$$



" Number systems"

- 1 Decimal system -> is a base to system (0,1,2,3,4,5,6,7,8,9)
- 2) Binary system) abase 2 system (0,1)
- 3 octal system -> a base 8 system (0,1,2,3,4,5,6,7)