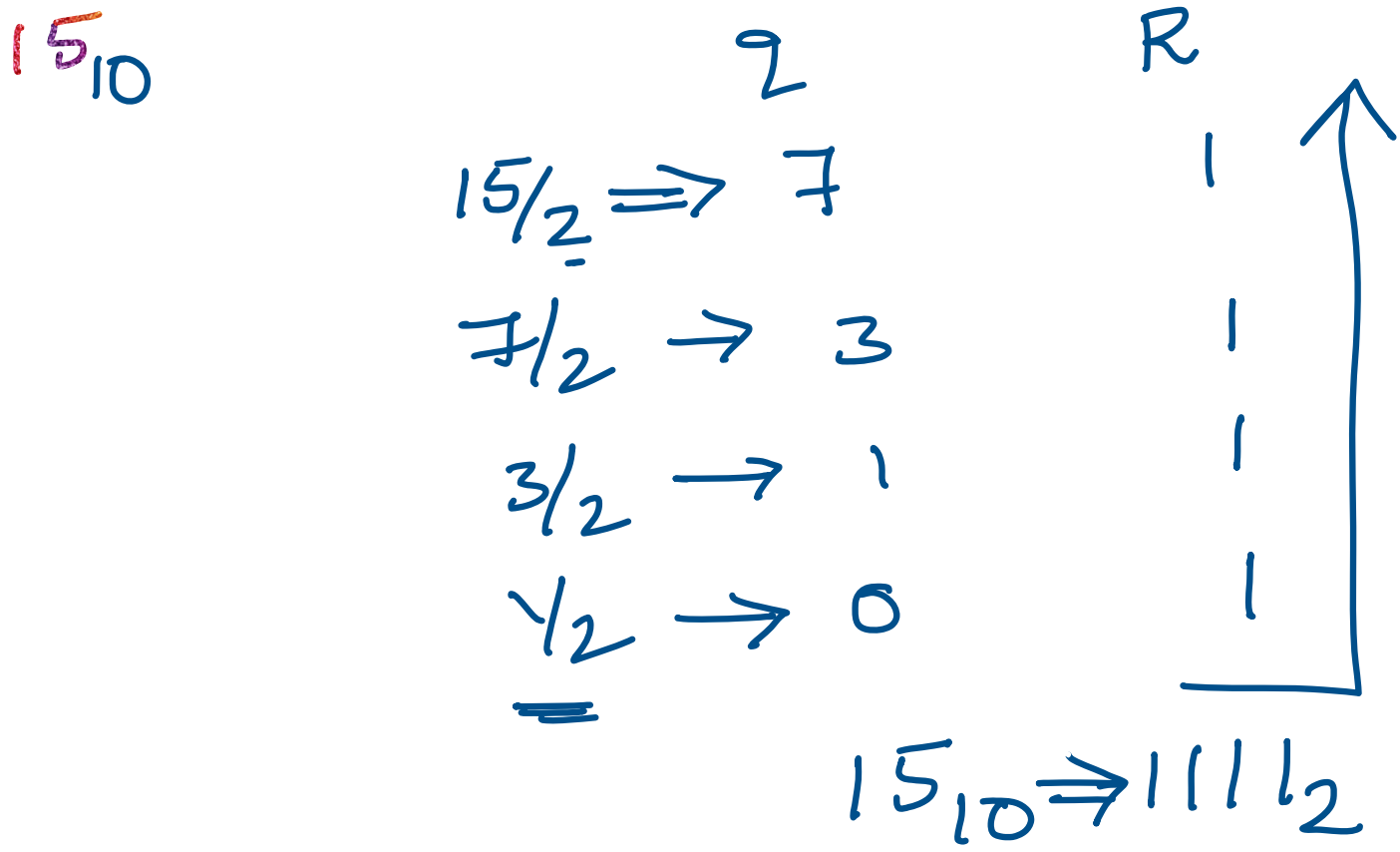
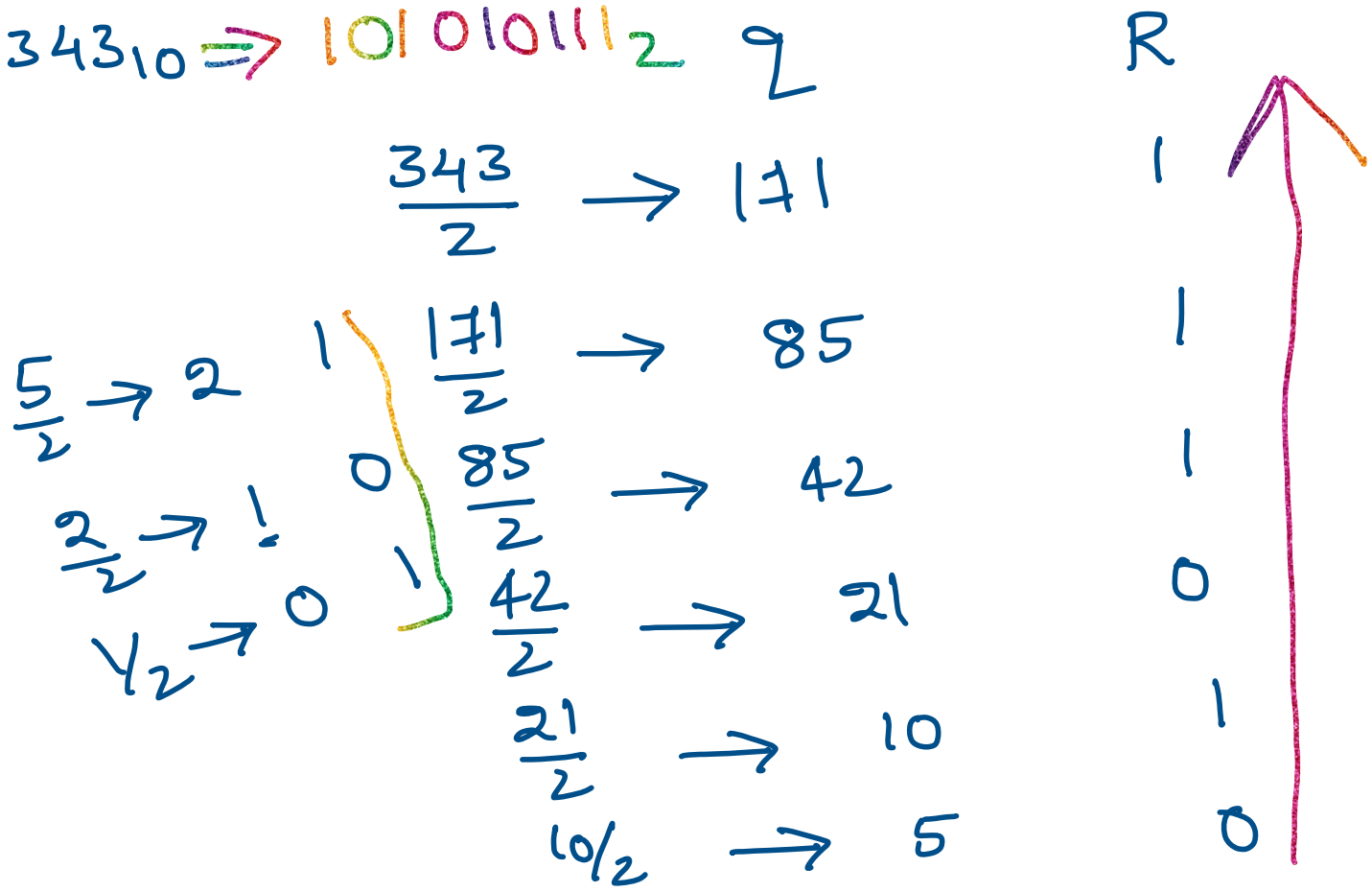
Example 1: Convert the decimal number 15_{10} to binary

Wednesday, 19 August, 2020 11:46 AM



Example 2: Convert the decimal number 343_{10} to binary

Monday, 24 August, 2020 4:39 PM



Example 3: Convert the binary number 1101_2 in the decimal form

Monday, 24 August, 2020 4:40 PM

1101_2

$2^3\ 2^2\ 2^1\ 2^0$

$1\ 1\ 0\ 1$

$\Rightarrow (1\times 2^3) + (1\times 2^2) + (0\times 2^1) + (1\times 2^0)$

$\Rightarrow 8+4+0+1 = 13_{10}$

$\Rightarrow$

$2^3\ 2^2\ 2^1\ 2^0$

$8\ 4\ 2\ 1$

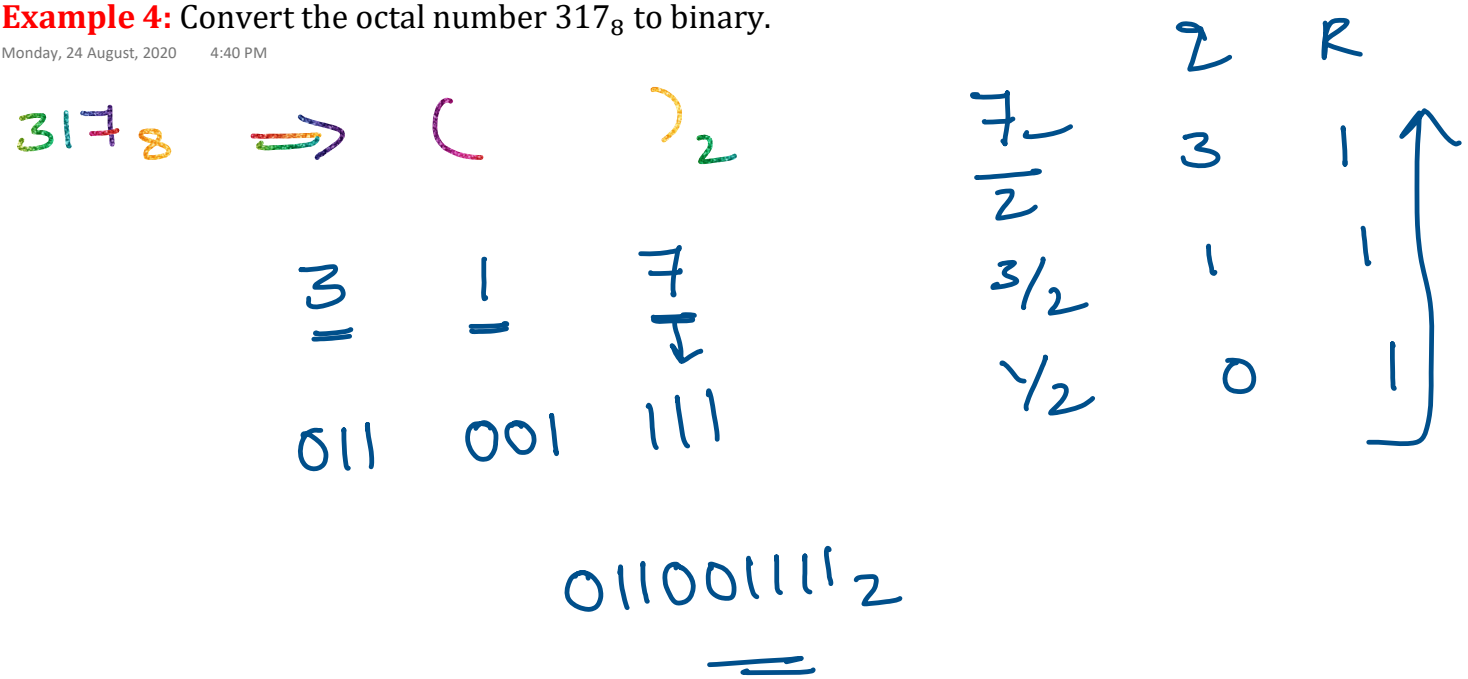
$8\ 4\ 2\ 1$

$1\ 1\ 0\ 1$

$\Rightarrow 8+4+1 = 13$

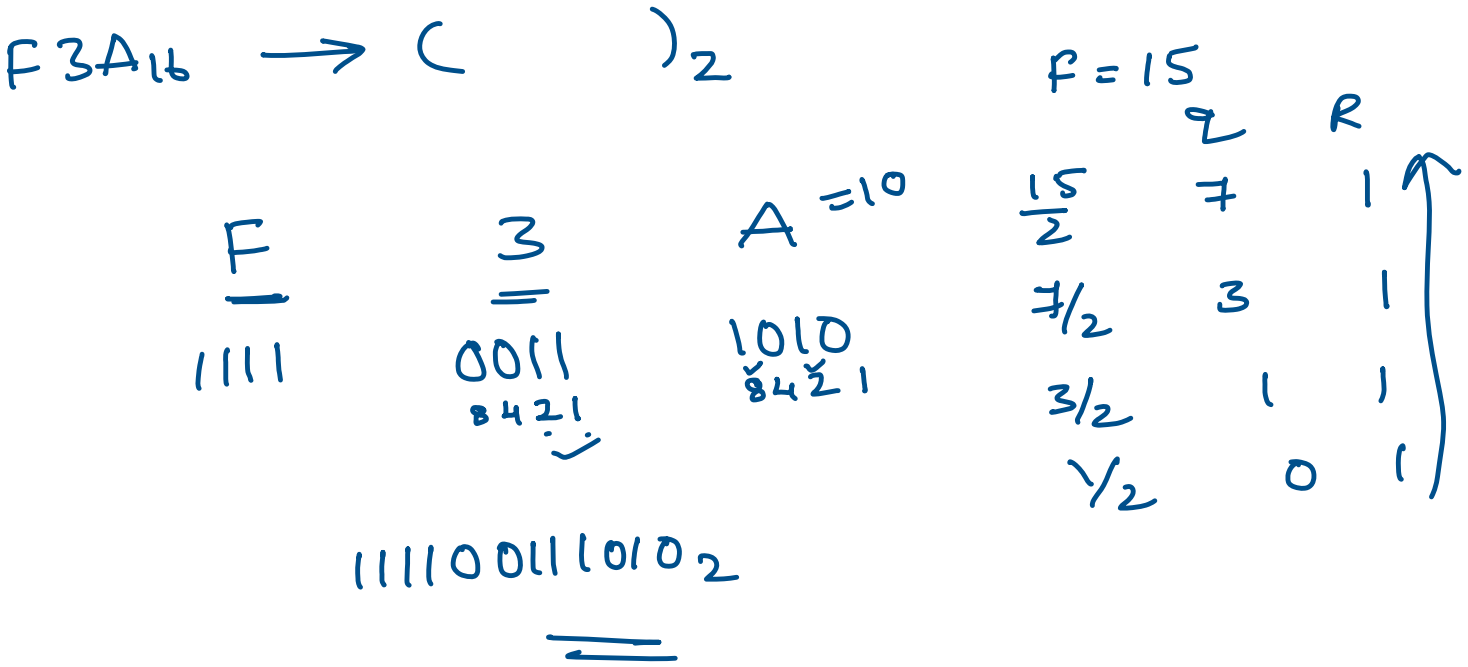
Example 4: Convert the octal number 317_8 to binary.

Monday, 24 August, 2020 4:40 PM



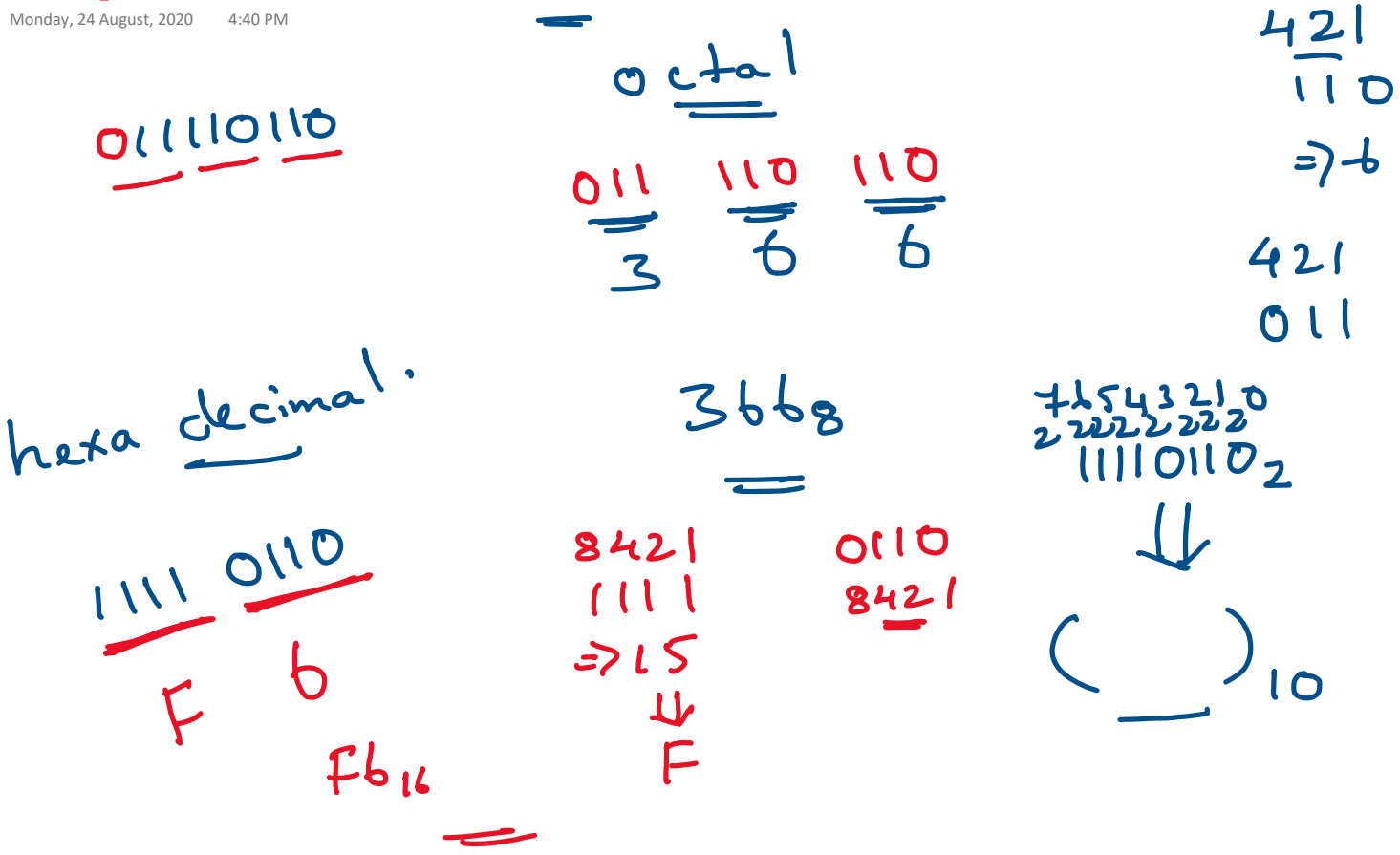
Example 5: Convert the hexadecimal number $F3A_{16}$ to binary

Monday, 24 August, 2020 4:40 PM



Example 6: Convert 11110110 to octal and to hexadecimal.

Monday, 24 August, 2020 4:40 PM



Assignment Q1

Monday, 24 August, 2020 4:40 PM

Convert the following binary numbers to decimal form

101

1. 8421
0101
⇒ 5

2. $2^2\ 2^1\ 2^0$
1 0 1

$= (1\times 2^2) + (0\times 2^1) + (1\times 2^0)$

$= 4 + 0 + 1$

$= 5$

Assignment Q2

Monday, 24 August, 2020 4:41 PM

Express the following decimal numbers in binary form

a. **7**

$7 \Rightarrow 111_2$

	Q	R
7/2	3	1
3/2	1	1
1/2	0	1

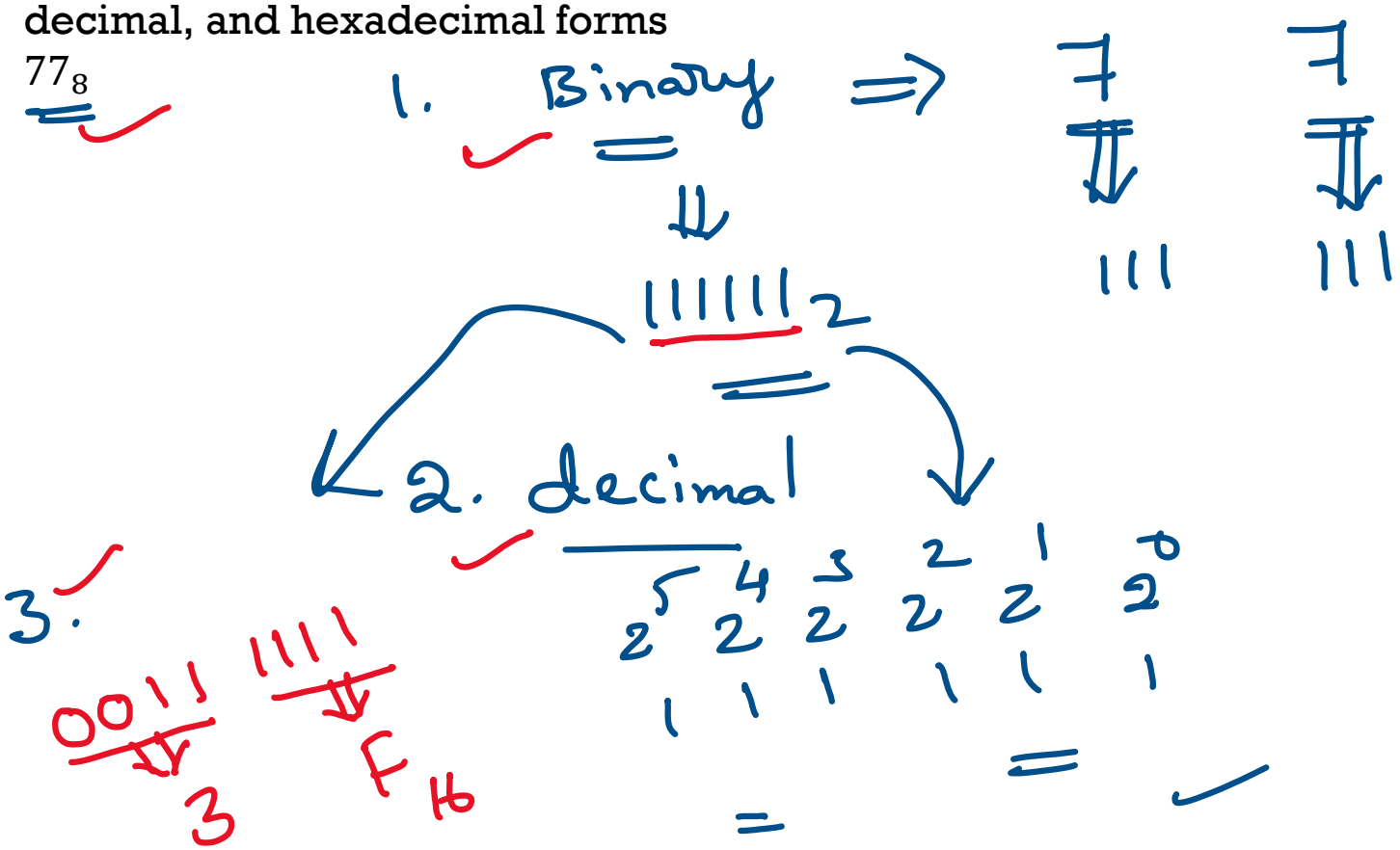
421
111
$\Rightarrow 4+2+1 = 7$

Assignment Q3

Monday, 24 August, 2020 4:41 PM

Express each of the following octal numbers in binary, decimal, and hexadecimal forms

77_8



Assignment Q4

Monday, 24 August, 2020 4:42 PM

Express the following decimal numbers in binary, octal, and hexadecimal forms

a. 313 ⇒ 1. decimal

2. octal

3. hexadecimal

313/2

Q ..... R

0

YouTube Video Links

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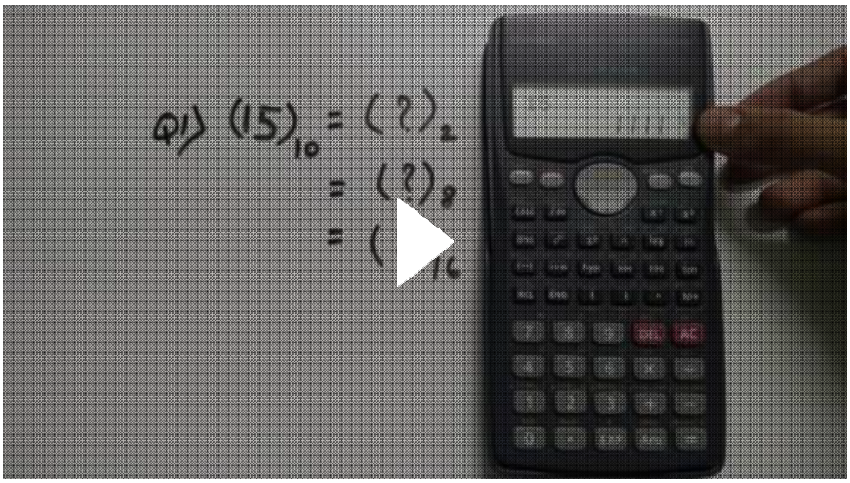
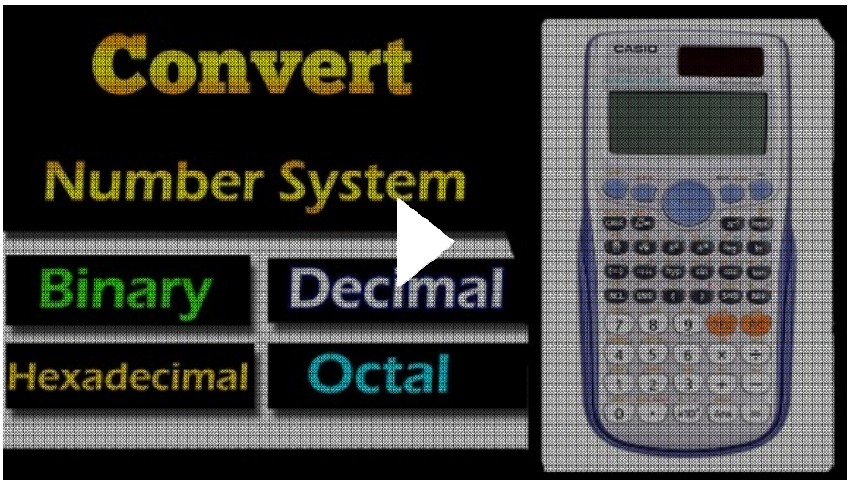
Number System Conversion - Decimal, Binary, Octal & Hexadecimal | Scientific Calc



Number Base Conversion in Scientific Calculator (fx-991 ES plus)



Casio Classwiz FX-991EX FX-87DEX FX-570EX Binary Decimal Hexadecimal Octal conversion


CASIO fx-991EX
CLASSWIZ
OCTAL
Binary
Decimal
Hexadecimal
CASIO
F2DC + A50B