

REMAINDER (MODULUS operation)

Wed Sep 19 2018

$$\begin{array}{r} 17 \overline{) 5} \\ 15 \\ \hline \end{array}$$

$$17 = 3 \cdot 5 + 2$$

$$\textcircled{2}$$

$$\begin{array}{r} 2713 \\ - 14 \\ \hline 131 \\ - 126 \\ \hline 53 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ \hline 193 \end{array}$$

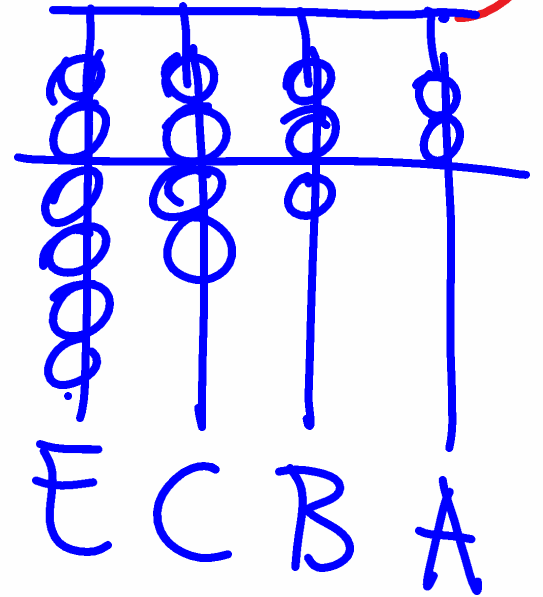
$$2713 = 193 \cdot 14 + \textcircled{11}$$

ABACUS (Chinese: <http://www.alcula.com>)

hexadecimal

16

0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F



DEC. SYSTEM

$$\begin{array}{r} 9 \\ + 1 \\ \hline 10 \end{array} \quad \begin{array}{r} 99 \\ + 1 \\ \hline 100 \end{array}$$

Hexadecimal System

$$\begin{array}{r} F \\ + 1 \\ \hline 10 \end{array} \quad \begin{array}{r} FF \\ + 1 \\ \hline 100 \end{array}$$

HEX SYSTEM (CONT.)

$$1F_{16} = 1 \cdot 16 + 15 = 31_{10}$$

$$2A_{16} = 2 \cdot 16 + 10 = 42_{10}$$

• What is 111_{16} in decimal system?

• Write a program Hex $\rightarrow$ Decimal
 $\hookrightarrow$ just 2 digits.