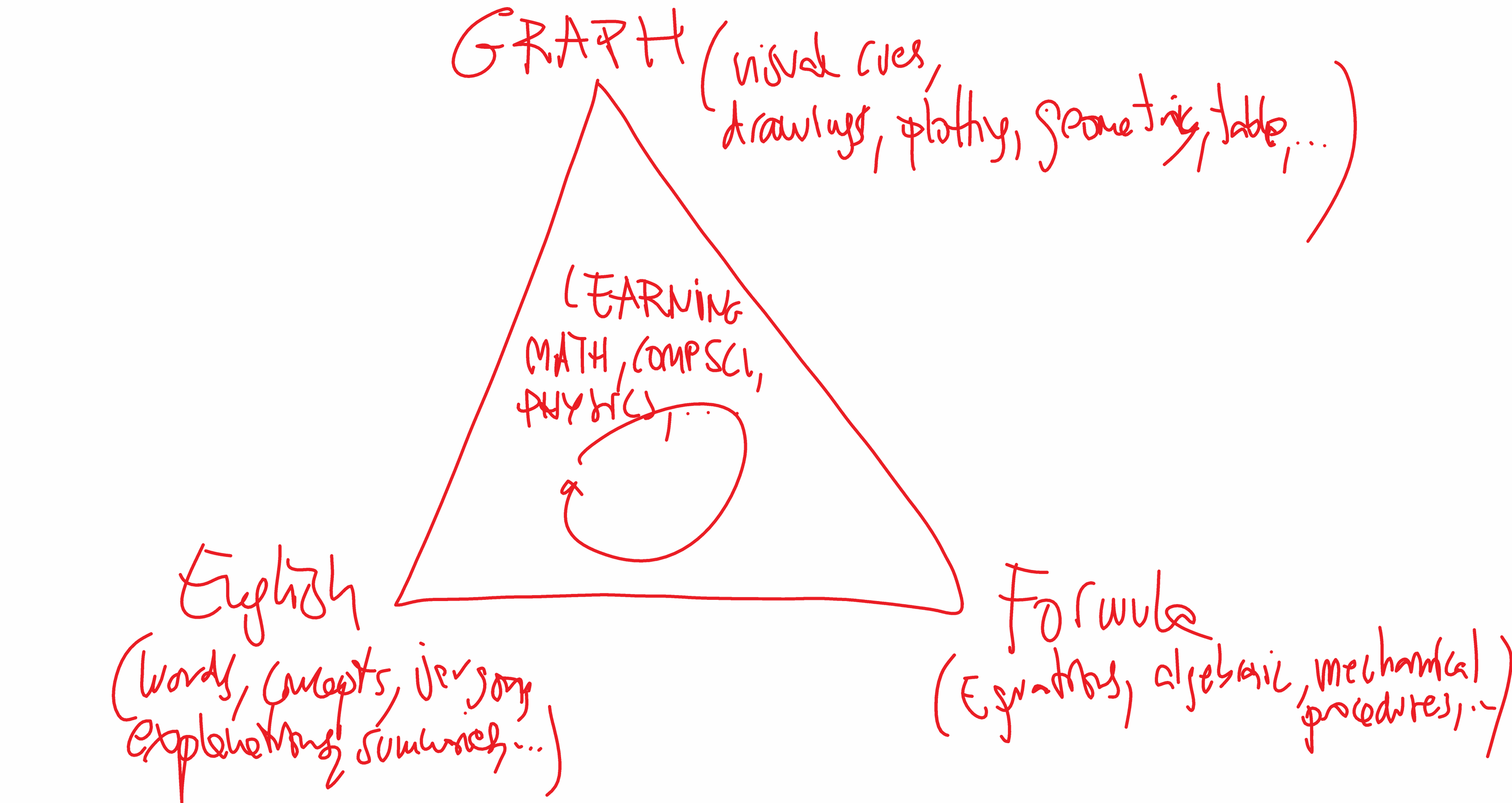
Wed 30 Oct 2018

$137_{10} = 10001001_2 = 89_{16}$

Decimal # system
Base 10 # system

Binary # system
Base 2 # system

Hexadecimal # syst.
Base 16


GRAPH
(visual cues, drawings, plotting, geometric, table, ...)
LEARNING
MATH, COMPSCI, PHYSICS, ...
English
(words, concepts, verbal explanations, summaries ...)
Formula
(Equations, algebraic, mechanical procedures, ...)

Write these #'s in the decimal system

a) 37_{16} b) $1\,0101\,0101_2$ c) 43_6 Not valid

a) $37_{16} = 3 \cdot 16 + 7 = 55_d$

b) 256 128 64 32 16 8 4 2 1

$1\,0101\,0101_2 = 256 + 64 + 16 + 4 + 1 =$

$= 341_d$

Write the following decimal # in binary & Hexadecimal

$572 = 286 \cdot 2 + 0$

$286 = 143 \cdot 2 + 0$

$143 = 71 \cdot 2 + 1$

$71 = 35 \cdot 2 + 1$

$35 = 17 \cdot 2 + 1$

$17 = 8 \cdot 2 + 1$

$8 = 4 \cdot 2 + 0$

$4 = 2 \cdot 2 + 0$

$2 = 1 \cdot 2 + 0$

$1 = 0 \cdot 2 + 1$

$572_d =$

$= 10\ 0011\ 1100_b$

$$572 = 35 \cdot 16 + 12$$
$$35 = 2 \cdot 16 + 3$$
$$2 = 0 \cdot 16 + 2$$

$572_{10} = 23C_{16}$

Number Systems