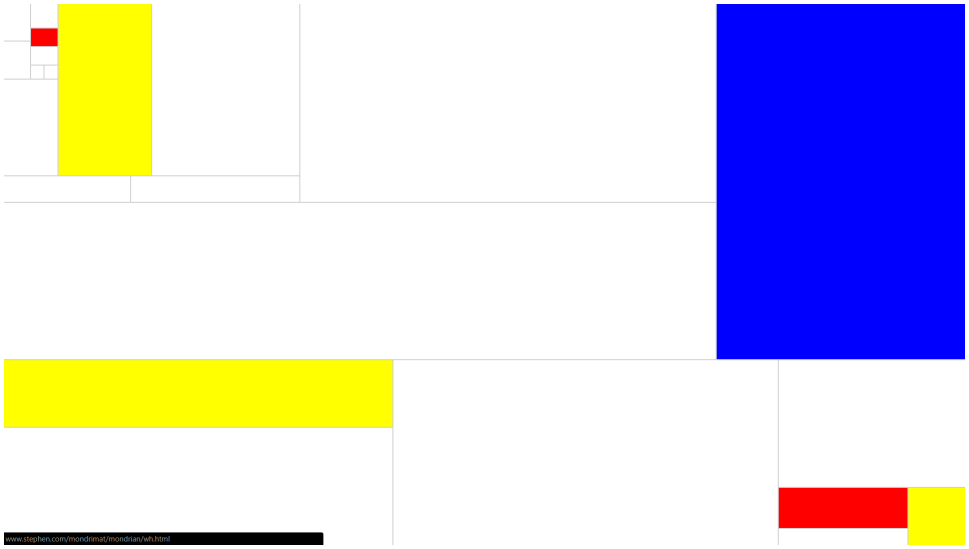
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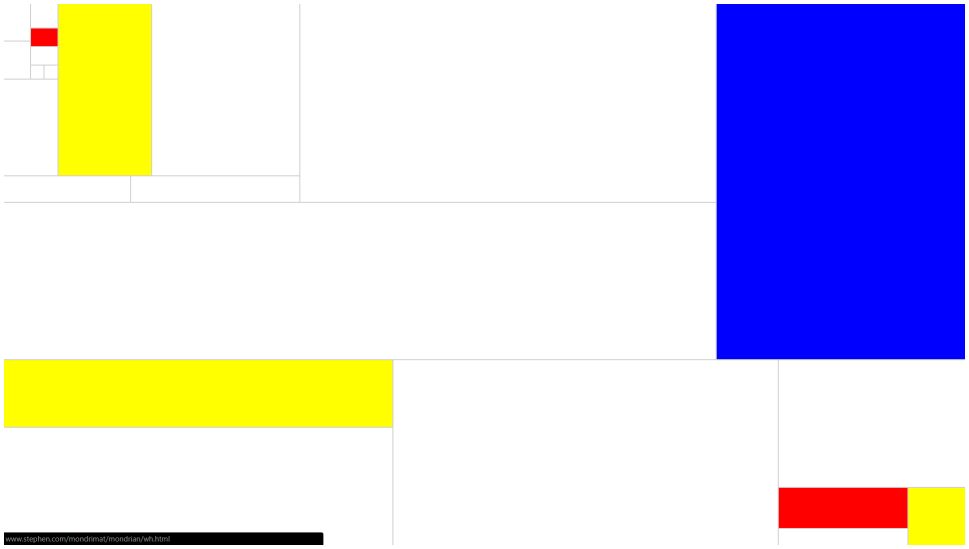
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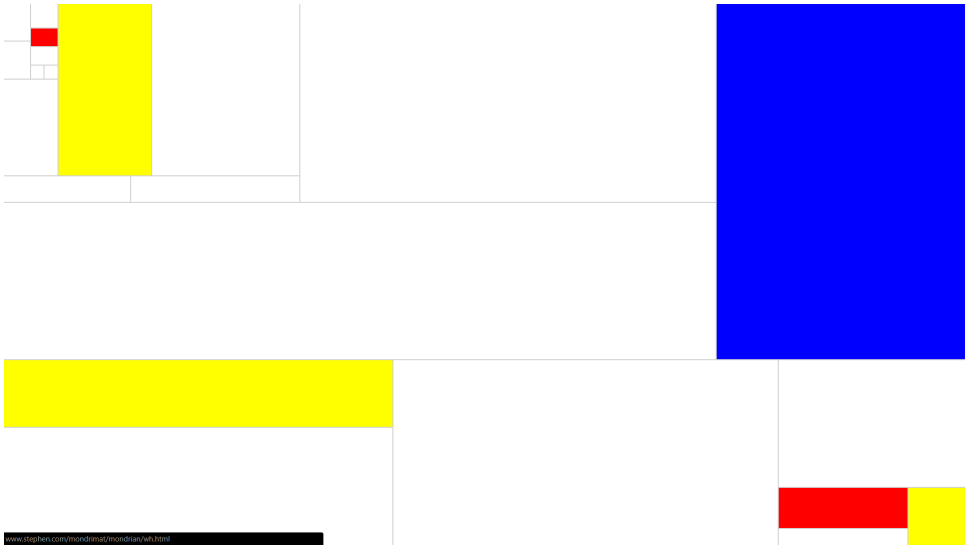
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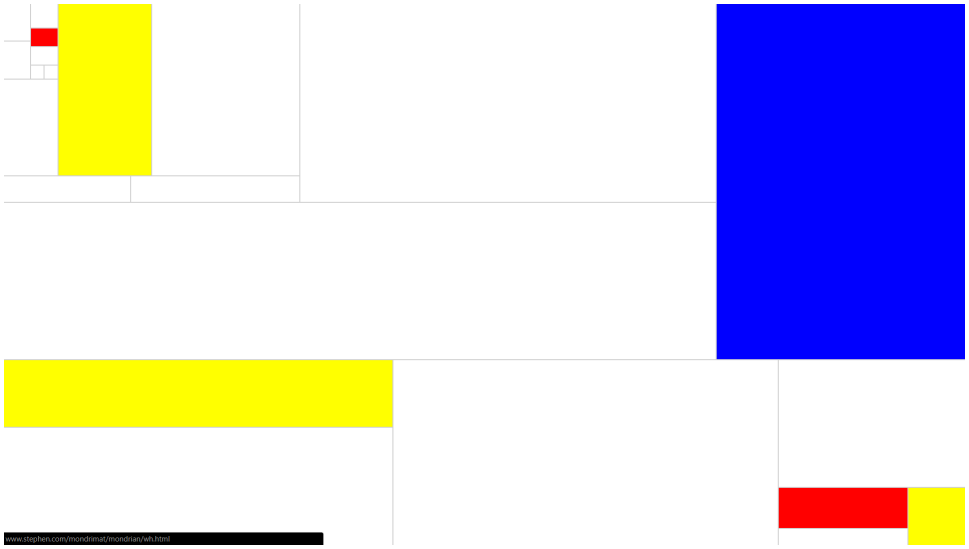
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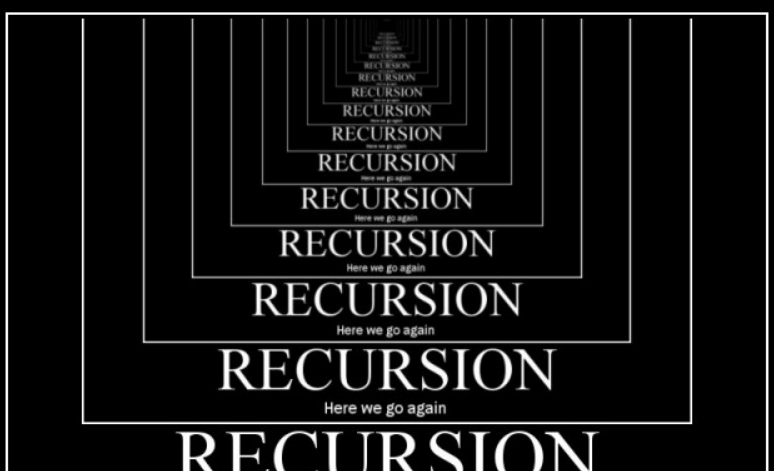
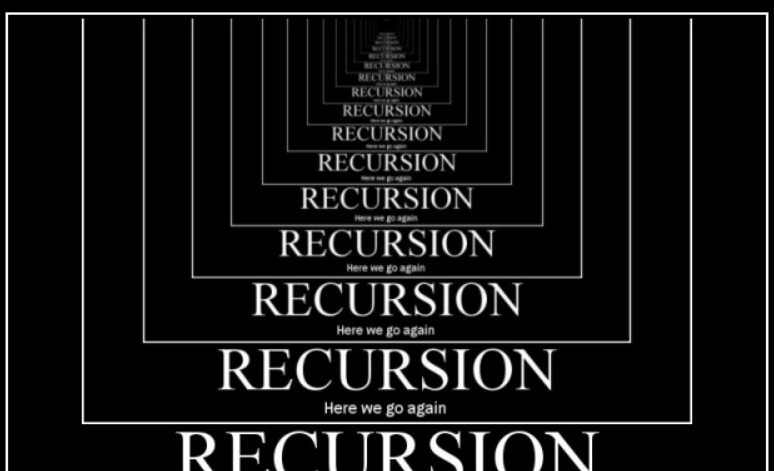


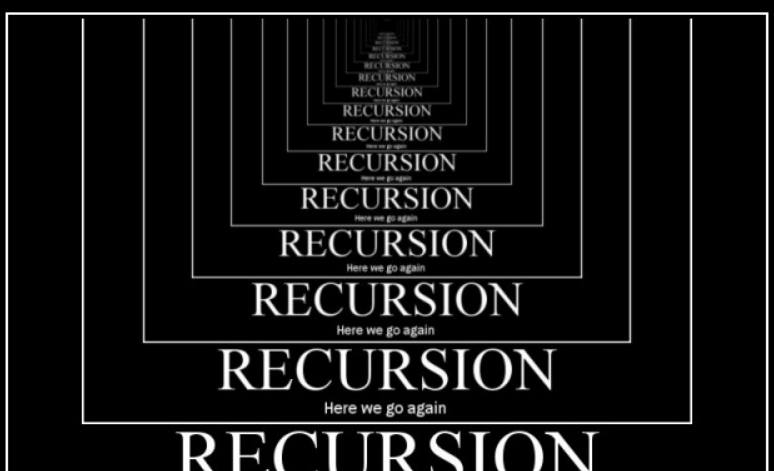
RECURSION

Here we go again



RECURSION

Here we go again



RECURSION

Here we go again


DIVIDE ET IMPERA


DIVIDE ET IMPERA


DIVIDE ET IMPERA

$n \cdot (n-1)!$

0!

$5 \cdot 4!$

$5 \cdot 4 \cdot 3!$

$5 \cdot 4 \cdot 3 \cdot 2!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 \cdot 0!$

0!

1

$= 120$

$n \cdot (n-1)!$

0!

$5 \cdot 4!$

$5 \cdot 4 \cdot 3!$

$5 \cdot 4 \cdot 3 \cdot 2!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 \cdot 0!$

0!

1

$= 120$

$n \cdot (n-1)!$

0!

$5 \cdot 4!$

$5 \cdot 4 \cdot 3!$

$5 \cdot 4 \cdot 3 \cdot 2!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 \cdot 0!$

0!

1

$= 120$

$n \cdot (n-1)!$

0!

$5 \cdot 4!$

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$5 \cdot 4 \cdot 3 \cdot 2!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 \cdot 0!$

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1

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$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 \cdot 0!$

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$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1!$

$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 \cdot 0!$

0!

1

$= 120$

$$f(x) = \begin{cases} f(x-1)+2 & \text{if } x > 10 \\ 8 & \text{if } x \leq 10 \end{cases}$$

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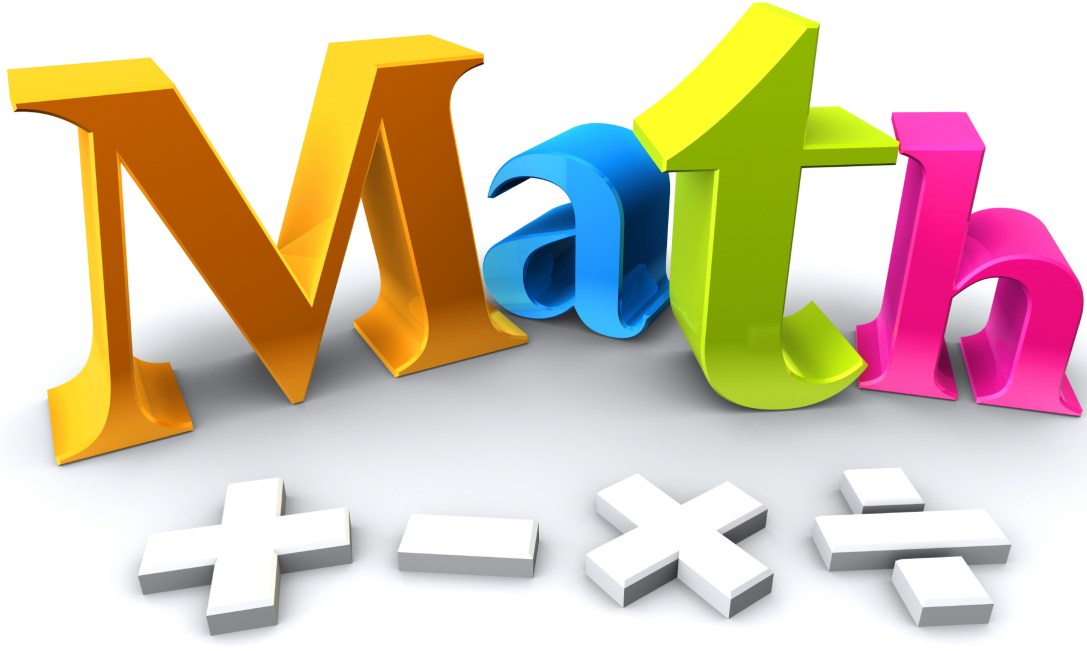
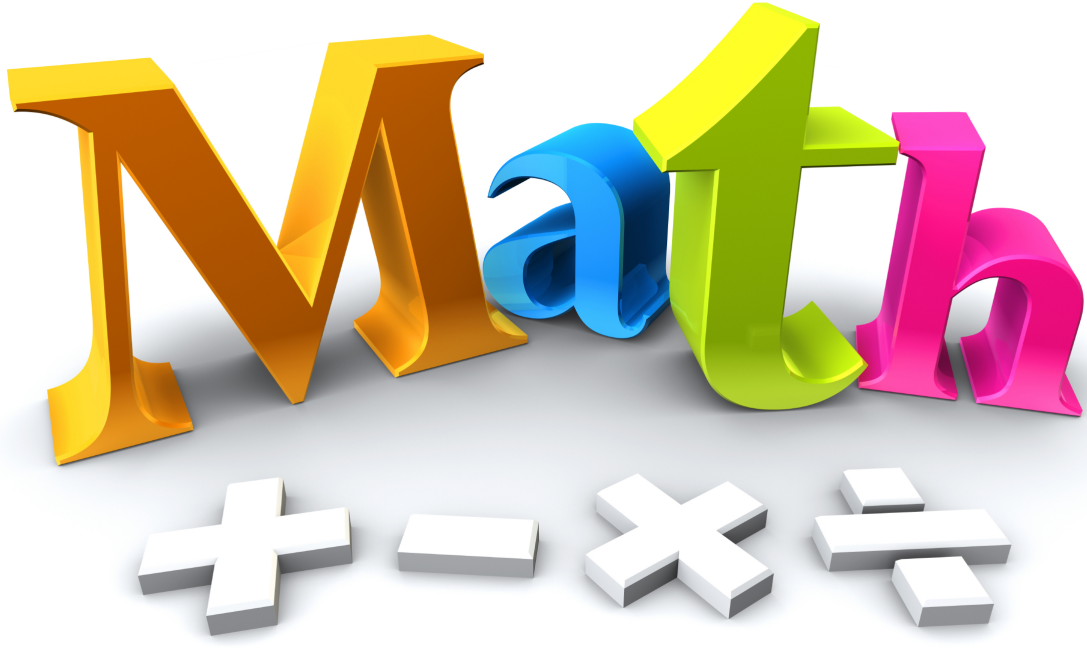
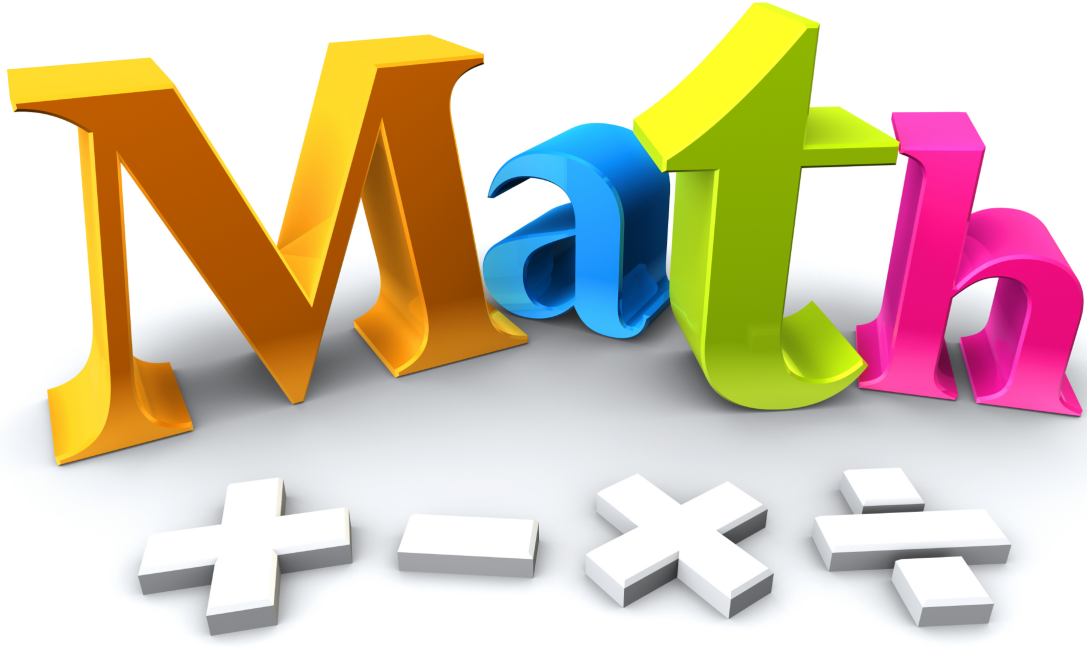

Math
+ − × ÷


Math
+ − × ÷


Math
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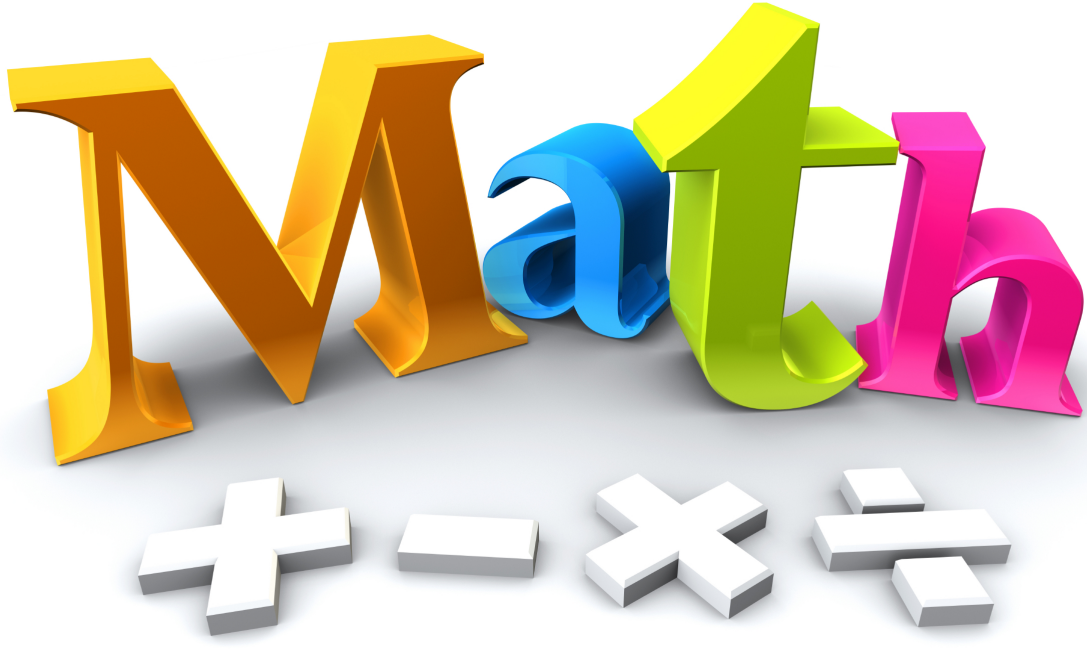
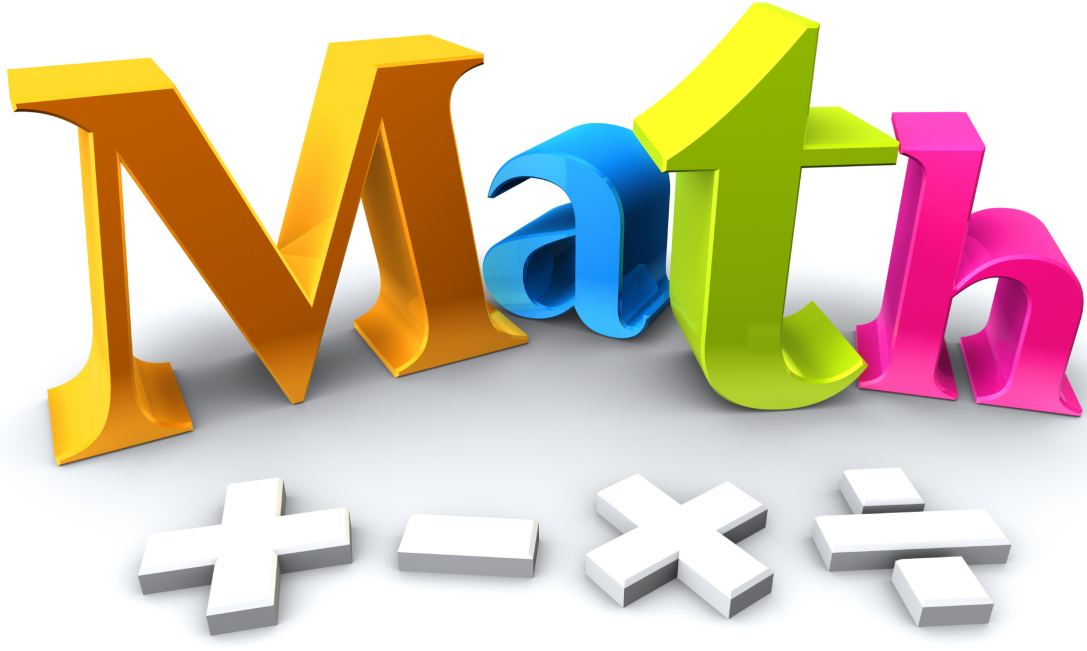
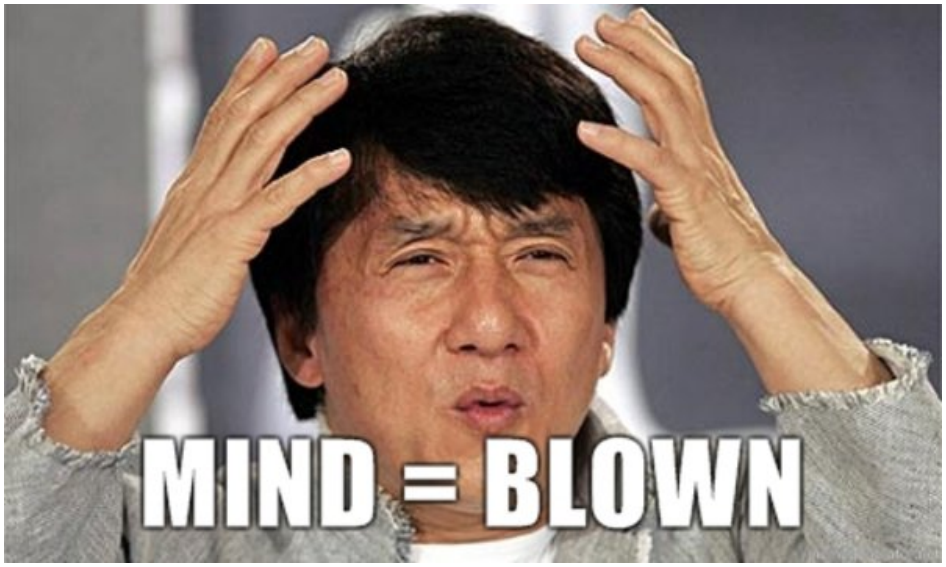
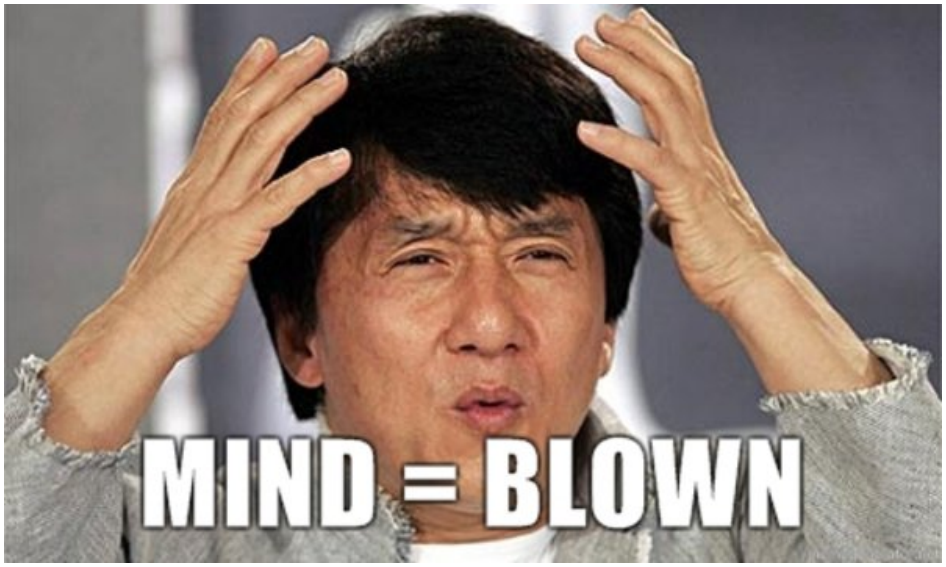

Math
+ − × ÷


Math
+ − × ÷

$$f(x) = \begin{cases} f(x-1) \cdot x & \text{if } x > 0 \\ 1 & \text{if } x = 0 \end{cases}$$


MIND = BLOWN

$$f(x) = \begin{cases} f(x-1) \cdot x & \text{if } x > 0 \\ 1 & \text{if } x = 0 \end{cases}$$


MIND = BLOWN

$$f(x) = \begin{cases} f(x-1)+2 & \text{if } x > 10 \\ 8 & \text{if } x \leq 10 \end{cases}$$

$x = 14$

$$f(14) : 14 > 10 : f(14 - 1) + 2$$

$f(13) : 13 > 10 : f(13 - 1) + 2$

$f(12) : 12 > 10 : f(12 - 1) + 2$

$$f(x) = \begin{cases} f(x-1)+2 & \text{if } x > 10 \\ 8 & \text{if } x \leq 10 \end{cases}$$

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$f(13) : 13 > 10 : f(13 - 1) + 2$

$f(12) : 12 > 10 : f(12 - 1) + 2$

$f(11) : 11 > 10 : f(11 - 1) + 2$

$f(10) : 10 \leq 10 : 8$

$f(10) = 8$

$$f(11) = 8 + 2 \ = 10$$

$$f(12) = 10 + 2 = 12$$

$$f(13) = 12 + 2 = 14$$

$f(14) = 14 + 2 = \mathbf{16}$

$f(11) : 11 > 10 : f(11 - 1) + 2$

$f(10) : 10 \leq 10 : 8$

$f(10) = 8$

$$f(11) = 8 + 2 \ = 10$$

$$f(12) = 10 + 2 = 12$$

$$f(13) = 12 + 2 = 14$$

$f(14) = 14 + 2 = \mathbf{16}$

$f(11) : 11 > 10 : f(11 - 1) + 2$

$f(10) : 10 \leq 10 : 8$

$f(10) = 8$

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