Exercice 1 : Calculer :

$A = |2+3|$ $B = |2-3|$ $C = |4-5+6|$ $D = |-7+8-9+5|$

$E = |13 \times 0,5 - 10 \times 0,8|$ $F = \left|3 \times \frac{1}{5} - 4\right|$ $G = \left|\frac{3}{5} - \frac{2}{3}\right|$ $H = |(2-3)^2|$

$I = \left|\frac{2}{7} - \frac{1}{3} - 1\right|$ $J = 3|2-1| - 4|7-10|$ $K = \left|\frac{1}{2} - \frac{1}{3}\right| + \left|\frac{1}{4} - \frac{1}{3}\right|$

Exercice 2 : Exprimer les expressions suivantes sans le symbole de la valeur absolue

$A = |-3x|$ $B = |4x|$ $C = |x^2|$ $D = |(x-2)^2|$

$E = |4x^2 + 12x + 9|$ $F = \left|\frac{1}{x}\right|$ $G = \left|\frac{-2}{x}\right|$ $H = |-5x^2|$

$I = |x-3|$ $J = |x+5|$ $K = |2x+5|$ $J = |2x-4|$

$K = |-3x+5|$ $K = |3-x|$ $K = |-3(x-2)+4(6-x)|$ $L = |x-2| + |x+3|$

$M = |2x-4| + |3-x|$ $N = |x-3| - |x+2|$

Exercice 3 :

Résoudre dans $\mathbb{R}$ les équations suivantes :

$1)|x| = 3$ $2)|-x| = 5$ $3)|x| = -3$ $4)|-3x| = 4$

$5)|x-3| = 2$ $6)|x+4| = 5$ $7)|2x-3| = 7$ $8)|5x-1| = \sqrt{3}$

$9)|x^2| = 6$ $10)|-2x^2| = 14$ $11)|x| - |-x| = 0$ $12)|6x-4| = 3$

$13)|x^2+2x+1| = 1$ $14)|2x-4| + |x+1| = 2$ $15)\ |x-5||x+6| = -4$ $16)\ |x-7| - |x+1| = 0$