Correction interro 1 2 1L

Exercice 1

$135+76=211$ | $2\times5^2=50$ | $24\times99+24\times1=2400$

$35-76=-41$ | $14\times3=42$ | $24(99+1)$

$3+7\times8=59$ | $-4^2=-16$ | $(1-4)^2=9$

Exercice 2 :

A) $A=\frac{1}{2}+\frac{3}{2}\times5-\frac{3}{4}$

$A=\frac{1}{2}+\frac{15}{2}-\frac{3}{4}$

$A=8-\frac{3}{4}$

$A=\frac{32-3}{4}$

$\boxed{A=\frac{29}{4}}$

$B=-3-2\times\frac{2}{1-\frac{1}{5}}$

$=-3-\frac{4}{\frac{4}{5}}$

$=-3-4\times\frac{5}{4}$

$\boxed{B=-8}$

$C=\frac{1-\frac{1}{3}}{2-\frac{5}{2}}$

$C=\frac{\frac{3}{3}-\frac{1}{3}}{\frac{4}{2}-\frac{5}{2}}$

$C=\frac{\frac{2}{3}}{-\frac{1}{2}}$

$C=-\frac{2}{3}\times2$

$\boxed{C=-\frac{4}{3}}$

$D=\frac{1}{2}\left(7-\frac{1}{3}\right)\left(2-\frac{1}{5}\right)$

$=\frac{1}{2}\left(\frac{21}{3}-\frac{1}{3}\right)\left(\frac{10}{5}-\frac{1}{5}\right)$

$=\frac{1}{2}\times\frac{20}{3}\times\frac{9}{5}$

$=\frac{2\times2\times5\times3\times3}{2\times3\times5}$

$\boxed{D=6}$

B) $E = 3^5 \times \frac{3^{-}}{3^{-8}} \times 3$

$E = 3^5 \times 3^{2+8} \times 3$

$E = 3^{5+10+1}$

$\boxed{E = 3^{16}}$

$F = 3^5 \times 9^{-2} \times 27^3$

$F = 3^5 \times (3^2)^{-2} \times (3^3)^3$

$F = 3^5 \times 3^{-4} \times 3^9$

$\boxed{F = 3^{10}}$

$G = \frac{(4 \times 9)^2}{6^2} \times \frac{75}{3^4}$

$G = \frac{(2^2 \times 3^2)^2 \times 5^2 \times 3}{3^2 \times 2^2 \times 3^4}$

$G = \frac{2^4 \times 3^4 \times 5^2 \times 3}{3^2 \times 2^2 \times 3^4}$

$\boxed{G = 2^2 \times 3^{-1} \times 5^2}$

c) $H = (ab^2)^3 \times \frac{a^3}{ba} \times b^{-2} \times \frac{b}{a^4}$

$H = \frac{a^3 \times b^6 \times a^3 \times b^{-2} \times b}{ba \times a^4}$

$H = \frac{a^6 \times b^5}{b \times a^5}$

$\boxed{H = a \times b^4}$

Exercice 3 :

A) 1) $A = 2(x+1) + (2x-1)(3x+2)$

$A = 2x + 2 + 6x^2 + 4x - 3x - 2$

$\boxed{A = 6x^2 + 3x}$

$C = x - 2 - (3x+1)(x-3)$

$= x - 2 - (3x^2 - 9x + x - 3)$

$= x - 2 - 3x^2 + 9x - x + 3$

$\boxed{C = -3x^2 + 9x + 1}$

$B = (x+1)^2 + (3x-1)^2$

$B = x^2 + 2x + 1 + 9x^2 - 6x + 1$

$\boxed{B = 10x^2 - 4x + 2}$

$D = (2x-1)^3$

$D = (2x-1)^2(2x-1)$

$D = (4x^2 + 1 - 4x)(2x-1)$

$D = 8x^3 - 4x^2 + 2x - 1 - 8x^2 + 4x$

$\boxed{D = 8x^3 - 12x^2 + 6x - 1}$

B) 1) $E = (x+2)(2x-1) + (x+2)(3x+4)$

$= (x+2)(2x-1+3x+4)$

$\boxed{E = (x+2)(5x+3)}$

2) $F = (3x+1)(4-x) - (2+2x)(3x+1)$

$F = (3x+1)(4-x-(2+2x))$

$F = (3x+1)(4-x-2-2x)$

$\boxed{F = (3x+1)(-3x+2)}$

3) $G = (2x-3)^2 + (2x-3)$

$G = (2x-3)(2x-3+1)$

$\boxed{G = (2x-3)(2x-2)}$ ou $G = 2(2x-3)(x-1)$

4) $H = 9x^2 - 12x + 4$

$H = (3x)^2 - 2 \times 3x \times 2 + 2^2$

$\boxed{H = (3x-2)^2}$

5) $I = 2x^2 - 1$

$I = (\sqrt{2}x)^2 - 1^2$

$\boxed{I = (\sqrt{2}x-1)(\sqrt{2}x+1)}$

6) $J = (x-1)^2 - (2x+3)^2$

$J = (x-1+2x+3)(x-1-(2x+3))$

$J = (3x+2)(x-1-2x-3)$

$\boxed{J = (3x+2)(-x-4)}$