Correction: Savoir factoriser(identités remarquables).

Exemple 1 *Développer et réduire les expressions suivantes:*

1. $\boxed{a^2 - b^2 = (a-b)(a+b).}$
   (a) $x^2 - 9y^2 = x^2 - (3y)^2 = (x-3y)(x+3y)$.
   (b) $(\underline{x+3})^2 - (\boxed{2x\text{-}5})^2 = [(x+3)-(2x-5)][(x+3)+(2x-5)] = (-x+8)(3x-2)$.
   (c) $\boxed{(x\text{-}5)}(2x-6) - (\underline{x^2-25}) = (x-5)(2x-6) - (x-5)(x+5) = (x-5)[(2x-6)-(x+5)] = (x-5)(x-11)$
   (d) $(\boxed{x\text{-}3})^2(3x+2) + 2x(\underline{x^2-9}) = (x-3)^2(3x+2) + 2x(x-3)(x+3) = (x-3)[(x-3)(3x+2) + 2x(x+3)] = (x-3)(3x^2+2x-9x-6+2x^2+6x) = (x-3)(5x^2-x-6)$
2. $\boxed{a^2 + 2ab + b^2 = (a+b)^2.}$
   (a) $x^2 + 10x + 25 = (x+5)^2$
   (b) $4x^2 + 20x + 25 = (2x+5)^2$
   (c) $\underline{(x+1)}(2x\text{-}6) - \boxed{(x^2+2x+1)}(x+1)(2x-6) - (x+1)^2 = (x+1)[(2x-6)-(x+1)] = (x+1)(x-7)$
   (d) $(\underline{\ x+3\ })(3x+2) + 2(\boxed{x^2+6x+9})(x+3)(3x+2) + 2(x+3)^2 = (x+3)[(3x+2)+2(x+3)] = (x+3)(5x+8)$