

## connection de la feuille n° 3 d'exercices.

Exercice 1 : a)  $(3x+2)(4x+1) = 12x^2 + 3x + 8x + 2$   
 $= 12x^2 + 11x + 2$

b)  $(7+3x)(4x-5) = 28x - 35 + 12x^2 - 15x$   
 $= 12x^2 + 13x - 35$

c)  $(x+6)(x+6) = x^2 + 12x + 36$

d)  $(\frac{3}{4}x + \frac{2}{3})(\frac{1}{5} + 2x) = \frac{3}{20}x + \frac{3}{2}x^2 + \frac{2}{25} + \frac{4}{3}x$   
 $= \frac{3}{2}x^2 + \frac{89}{60}x + \frac{2}{25}$

## Exercice 2

a)  $(x+5)^2 = x^2 + 10x + 25$

b)  $(x-9)^2 = x^2 - 18x + 81$

c)  $(8+7x)^2 = 64 + 112x + 49x^2$

d)  $(4-3x)^2 = 16 - 24x + 9x^2$

e)  $(2+6x)(2-6x) = 4 - 36x^2$

f)  $(5+4x)(5-4x) = 25 - 16x^2$

## Exercice 3

a)  $100 - x^2 = (10-x)(10+x)$

b)  $x^2 + 6x + 9 = (x+3)^2$

c)  $36x^2 - 25 = (6x-5)(6x+5)$

d)  $9x^2 - 12x + 4 = (3x-2)^2$

e)  $49x^2 - 49 = (7x-7)(7x+7)$

f)  $100 - 40x + 4x^2 = (10-2x)^2$