# Correction exercices 59 ; 60 ; 61 et 62 p 46 :

**59** **a.** $(x+5)(x+3) = x^2+5x+3x+15$
**b.** $(3x+2)(x+4) = 3x^2+12x+2x+8$
**c.** $(x+3)(x-2) = x^2-2x+3x-6$
**d.** $(x-4)(x-1) = x^2-1x-4x+4$

**60** On développe à l'aide de la propriété :

$$(a+b)(c+d) = ac+ad+bc+bd.$$

- $A = (x+4)(x+5)$

$A = x \times x + x \times 5 + 4 \times x + 4 \times 5$
$A = x^2+5x+4x+20$

$A = x^2+9x+20$

- $B = (x-3)(x+8)$

$B = x \times x + x \times 8 - 3 \times x - 3 \times 8$
$B = x^2+8x-3x-24$

$B = x^2+5x-24$

**61** - $C = (2y+1)(y+3)$

$C = 2y \times y + 2y \times 3 + 1 \times y + 1 \times 3$
$C = 2y^2+6y+y+3$
$C = 2y^2+7y+3$

- $D = (y-5)(y-2)$

$D = y \times y - y \times 2 - 5 \times y + 5 \times 2$
$D = y^2-2y-5y+10$
$D = y^2-7y+10$

**62** - $E = (4a+3)(3a+2)$

$E = 4a \times 3a + 4a \times 2 + 3 \times 3a + 3 \times 2$
$E = 12a^2+8a+9a+6$
$E = 12a^2+17a+6$

- $F = (3-2a)(a+1)$

$F = 3 \times a + 3 \times 1 - 2a \times a - 2a \times 1$
$F = 3a+3-2a^2-2a$
$F = -2a^2+a+3$