

EXERCICE 1A.1 - Donner le carré de chaque expression :

a. $(3x)^2 = 9x^2$

b. $(2x)^2 = \dots\dots$

c. $(5x)^2 = \dots\dots$

d. $(6x)^2 = \dots\dots$

e. $(9x)^2 = \dots\dots$

f. $(7x)^2 = \dots\dots$

g. $(10t)^2 = \dots\dots$

h. $(4a)^2 = \dots\dots$

i. $(x^2)^2 = \dots\dots$

j. $(-5x)^2 = \dots\dots$

EXERCICE 1A.2 - Réduire chaque produit :

a. $2 \times 3x \times 4 = 24x$

b. $3 \times 5x \times 2x = \dots\dots$

c. $4 \times 2x \times 5 = \dots\dots$

d. $x \times 8 \times 2x = \dots\dots$

e. $3 \times x \times 2x = \dots\dots$

f. $7 \times 4 \times 2x = \dots\dots$

g. $2 \times 7x \times 3 = \dots\dots$

h. $3 \times 5x \times 2x = \dots\dots$

i. $2 \times 6x \times 3x = \dots\dots$

j. $4 \times 10x \times 6x = \dots\dots$

EXERCICE 1A.3 - Développer en utilisant l'identité remarquable : $(a + b)^2 = a^2 + 2ab + b^2$

$Z = (x + 3)^2$ $Z = x^2 + 2 \times x \times 3 + 3^2$ $Z = x^2 + 6x + 9$	$A = (3 + x)^2$	$B = (x + 5)^2$
$C = (2x + 1)^2$	$D = (1 + 3x)^2$	$E = (3x + 2)^2$
$F = (5x + 3)^2$	$G = (x^2 + 1)^2$	$H = (3 + 4x)^2$

EXERCICE 1A.4 - Développer en utilisant l'identité remarquable : $(a - b)^2 = a^2 - 2ab + b^2$

$Z = (5 - x)^2$ $Z = 5^2 - 2 \times 5 \times x + x^2$ $Z = 25 - 10x + x^2$	$A = (x - 2)^2$	$B = (1 - 3x)^2$
$C = (3 - x)^2$	$D = (2x - 1)^2$	$E = (3 - 5x)^2$
$F = (3x - 2)^2$	$G = (4x - 3)^2$	$H = (4 - 3x^2)^2$

EXERCICE 1A.5 - Développer en utilisant l'identité remarquable : $(a + b)(a - b) = a^2 - b^2$

$Z = (2x + 5)(2x - 5)$ $Z = (2x)^2 - 5^2$ $Z = 4x^2 - 25$	$A = (x + 2)(x - 2)$	$B = (x + 3)(x - 3)$
$C = (3x - 1)(3x + 1)$	$D = (2x + 1)(2x - 1)$	$E = (5 + 3x)(5 - 3x)$
$F = (3x - 2)(3x + 2)$	$G = (3 + 4x)(3 - 4x)$	$H = (4x^2 + 3)(4x^2 - 3)$