EXERCICE 1D.1

a. Factoriser en utilisant l'identité remarquable : $a^2 - b = (a - b)(a + b)$

$Z(x) = (x + 2)^2 - 81$	$A(x) = (x + 1)^2 - 4$	$B(x) = (x + 2)^2 - 9$
$Z(x) = (x + 2)^2 - 9^2$ $Z(x) = (x + 2 + 9)(x + 2 - 9)$ $Z(x) = (x + 11)(x - 7)$		
$C(x) = (2x + 1)^2 - 25$	$D(x) = 16 - (3x + 2)^2$	$E(x) = 36 - (4 - 3x)^2$

b. Même consigne :

$Z(x) = (x + 2)^2 - (2x - 3)^2$	$A(x) = (x + 1)^2 - (2x + 3)^2$	$B(x) = (2x - 1)^2 - (5 + x)^2$
$Z(x)=[(x+2)+(2x-3)][(x+2)-(2x-3)]$ $Z(x) = (x+2+2x-3)(x+2-2x+3)$ $Z(x) = (3x - 1)(-x + 5)$		
$C(x) = (4x - 1)^2 - (3x + 4)^2$	$D(x) = (3x - 4)^2 - (6x + 1)^2$	$E(x) = (x + 6)^2 - (3x - 1)^2$

EXERCICE 1D.2 - Factoriser d'abord l'expression soulignée pour retrouver le facteur commun :

$Z(x) = (x + 2)(x + 1) + \underline{x^2 - 1}$	$A(x) = (x + 2)(3x - 1) + \underline{x^2 - 4}$	$B(x) = (x + 4)(2x - 1) + \underline{x^2 - 16}$
$Z(x) = (x+2)(\underline{x+1})+(\underline{x+1})(x-1)$ $Z(x) = (x+1)[(x+2) + (x-1)]$ $Z(x) = (x + 1)(x + 2 + x - 1)$ $Z(x) = (x + 1)(2x + 1)$		
$C(x) = (x - 3)(x + 1) - (\underline{x^2 - 9})$	$D(x) = (2x + 1)(x - 2) - (\underline{x^2 - 4})$	$E(x) = \underline{25 - x^2} - (x - 5)(2x + 3)$