

$$\begin{aligned}
 \text{a. } & (x+3)(x-3) \\
 & = x(x-3) + 3(x-3) \\
 & \quad \underline{x^2 - 3x + 3x - 9} \\
 & \quad x^2 - 9
 \end{aligned}$$

Difference of Two Squares
 * $(a+b)(a-b) = a^2 - b^2$

$$\text{b. } (x+7)(x-7) = x^2 - 49$$

$\begin{array}{c} 7x \\ -7x \end{array}$

$$\text{c. } (3x-5)(3x+5) = 9x^2 - 25$$

$$\text{d. } (2x+3)(2x-3) = 4x^2 - 9$$

$$\text{e. } (7x+1)(7x-1) = 49x^2 - 1$$

a. $(3x - 5)(4x + 1)$

	$3x$	-5
$4x$	$12x^2$	$-20x$
1	$3x$	-5

 $= 12x^2 - 17x - 5$

b. $(7x + 3)(2x - 5)$

	$7x$	3
$2x$	$14x^2$	$6x$
-5	$-35x$	-15

 $= 14x^2 - 29x - 15$

$7x(2x - 5) + 3(2x - 5)$
 $\rightarrow 14x^2 - 35x + 6x - 15$