Fill In The Blanks...

Harder Completing the Square $(ax^2 + bx + c)$

Quadratic Expression	Take out Common Factor	Complete the Square	Multiply by Common Factor	Completed Square
$2x^2 + 16x$	$2[x^2 + 8x]$	$2[(x + 4)^2 - 16]$	$2(x + 4)^2 - 32$	$2(x + 4)^2 - 32$
$3x^2 - 18x$	$3[x^2 - 6x]$	$3[(x - 3)^2 - 9]$	$3(x - 3)^2 - 27$	$3(x - 3)^2 - 27$
$2x^2 + 12x + 1$	$2[x^2 + 6x] + 1$	$2[(x + 3)^2 - 9] + 1$	$2(x + 3)^2 - 18 + 1$	$2(x + 3)^2 - 17$
$2x^2 - 20x - 7$	$2[x^2 - 10x] - 7$	$2[(x - 5)^2 - 25] - 7$	$2(x - 5)^2 - 50 - 7$	$2(x - 5)^2 - 57$
$3x^2 + 6x - 5$	$3[x^2 + 2x] - 5$	$3[(x + 1)^2 - 1] - 5$	$3(x + 1)^2 - 3 - 5$	$3(x + 1)^2 - 8$
$4x^2 + 16x - 1$	$4[x^2 + 4x] - 1$	$4[(x + 2)^2 - 4] - 1$	$4(x + 2)^2 - 16 - 1$	$4(x + 2)^2 - 17$
$5x^2 - 30x + 11$	$5[x^2 - 6x] + 11$	$5[(x - 3)^2 - 9] + 11$	$5(x - 3)^2 - 45 + 11$	$5(x - 3)^2 - 34$
$2x^2 - 10x + 3$	$2[x^2 - 5x] + 3$	$2\left[\left(x - \dfrac{5}{2}\right)^2 - \dfrac{25}{4}\right] + 3$	$2\left(x - \dfrac{5}{2}\right)^2 - \dfrac{25}{2} + 3$	$2\left(x - \dfrac{5}{2}\right)^2 - \dfrac{19}{2}$
$2x^2 + 6x - 1$	$2[x^2 + 3x] - 1$	$2\left[\left(x + \dfrac{3}{2}\right)^2 - \dfrac{9}{4}\right] - 1$	$2\left(x + \dfrac{3}{2}\right)^2 - \dfrac{9}{2} - 1$	$2\left(x + \dfrac{3}{2}\right)^2 - \dfrac{11}{2}$
$3x^2 - 9x + 2$	$3[x^2 - 3x] + 2$	$3\left[\left(x - \dfrac{3}{2}\right)^2 - \dfrac{9}{4}\right] + 2$	$3\left(x - \dfrac{3}{2}\right)^2 - \dfrac{27}{4} + 2$	$3\left(x - \dfrac{3}{2}\right)^2 - \dfrac{19}{4}$