

Completing the Square

Write each of these expressions in the form $(x + a)^2 + b$

(a)	(b)	(c)	(d)
$x^2 + 8x + 3$ $= (x + 4)^2 - 16 + 3$ $=$	$x^2 + 6x - 1$ $= (x + 3)^2 -$ $=$	$x^2 - 4x + 11$ $= (x - 2)^2 -$ $=$	$x^2 - 10x - 5$ $= (x \quad)^2 -$ $=$
(e)	(f)	(g)	(h)
$x^2 - 2x + 7$	$x^2 + 4x$	$x^2 - 12x + 2$	$x^2 + 16x + 21$
(i)	(j)	(k)	(l)
$x^2 + x + 4$	$x^2 + 3x - 2$	$x^2 - x + 9$	$x^2 + 5x + 3$
(m)	(n)	(o)	(p)
$x^2 - 20x + 35$	$x^2 + 9x - 11$	$x^2 - 7x$	$x^2 - 3x - 8$