

Fill in the Blanks Factorising Quadratics using a Grid

Quadratic Expression	Expanded Expression	Grid	Factorised Expression									
$x^2 + 9x + 20$	$x^2 + 5x + 4x + 20$	<table border="1"> <tr> <td>×</td> <td>x</td> <td>$+5$</td> </tr> <tr> <td>x</td> <td>x^2</td> <td>$+5x$</td> </tr> <tr> <td>$+4$</td> <td>$+4x$</td> <td>$+20$</td> </tr> </table>	×	x	$+5$	x	x^2	$+5x$	$+4$	$+4x$	$+20$	$(x + 5)(x + 4)$
×	x	$+5$										
x	x^2	$+5x$										
$+4$	$+4x$	$+20$										
$x^2 + 12x + 27$	$x^2 + 9x + 3x + 27$	<table border="1"> <tr> <td>×</td> <td></td> <td></td> </tr> <tr> <td></td> <td>x^2</td> <td>$+9x$</td> </tr> <tr> <td></td> <td>$+3x$</td> <td>$+27$</td> </tr> </table>	×				x^2	$+9x$		$+3x$	$+27$	
×												
	x^2	$+9x$										
	$+3x$	$+27$										
$x^2 + 7x + 12$	$x^2 + 4x + 3x + 12$	<table border="1"> <tr> <td>×</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	×									
×												
$x^2 - 8x + 15$		<table border="1"> <tr> <td>×</td> <td></td> <td></td> </tr> <tr> <td></td> <td>x^2</td> <td>$-3x$</td> </tr> <tr> <td></td> <td></td> <td>$+15$</td> </tr> </table>	×				x^2	$-3x$			$+15$	
×												
	x^2	$-3x$										
		$+15$										
$x^2 + 4x - 12$		<table border="1"> <tr> <td>×</td> <td></td> <td></td> </tr> <tr> <td></td> <td>x^2</td> <td></td> </tr> <tr> <td></td> <td>$-2x$</td> <td>-12</td> </tr> </table>	×				x^2			$-2x$	-12	
×												
	x^2											
	$-2x$	-12										
$x^2 + 3x - 10$		<table border="1"> <tr> <td>×</td> <td></td> <td></td> </tr> <tr> <td></td> <td>x^2</td> <td>$+5x$</td> </tr> <tr> <td></td> <td></td> <td>-10</td> </tr> </table>	×				x^2	$+5x$			-10	
×												
	x^2	$+5x$										
		-10										
$x^2 - 8x - 9$		<table border="1"> <tr> <td>×</td> <td></td> <td></td> </tr> <tr> <td></td> <td>x^2</td> <td></td> </tr> <tr> <td></td> <td>$-9x$</td> <td>-9</td> </tr> </table>	×				x^2			$-9x$	-9	
×												
	x^2											
	$-9x$	-9										