

## Quadratic card sort

Place the cards below on the grid on page 2, aiming for at least one in each cell. If this is not possible, explain why.

$y = x^2 + 2x + 4$	$y = x^2 - 5x + 4$
$y = 2x^2 - 5x - 3$	$y = x^2 - 4x + 4$
$y = x^2 + 7x - 3$	$y = 4 + 3x - x^2$
$y = x^2 + 5x - 2$	$y = 6x - x^2 - 9$
$y = x^2 - 3x - 1$	$y = x^2 + 10x + 9$
$y = x^2 + x + 3$	$y = x^2 + 4x + 4$
$y = x^2 - 2\sqrt{3}x + 3$	$y = 3x - x^2 + 7$

	Factorises with integers	Does not factorise with integers
Two x-intercepts		
No x-intercepts		
Repeated x-intercept		
Has a minimum point		
Has a maximum point		
y-intercept is 4		