

Vertex Form Worksheet – Translations

Name _____

Expand each quadratic and write it in Standard Form. Identify the Vertex for each. Attach work on separate sheet.

Vertex Form	Standard Form	Vertex / Opens Up or Down
$y = (x + 3)^2 - 10$		
$y = (x - 5)^2 + 4$		
$y = 3(x + 7)^2 - 6$		
$y = -2(x + 2)^2 - 3$		

For each problem below write the equation of the parabola once it has been translated. (Use vertex form).

Original Equation	Original Vertex	Translation	New Equation
$y = x^2 + 24x + 134$		6 left, 7 down	
$y = x^2 - 8x + 22$		8 left, 4 up	
$y = 2x^2 + 4x + 2$		3 right, 2 down Flipped	
$y = -4x^2 - 24x - 32$		9 right, 4 up Flipped	