Solving Hidden Quadratics

Hidden Quadratic	Substitution $y = \cdots$	Quadratic in terms of y	Factorise and Solve Quadratic	Solutions to Hidden Quadratic
$x^4 - 6x^2 + 8 = 0$	$y = x^2$	$y^2 - 6y + 8 = 0$	$(y-4)(y-2) = 0$ $y = 4, y = 2$	$x^2 = 4, x^2 = 2$ $x = \pm 2, x = \pm\sqrt{2}$
$a^6 - 28a^3 + 27 = 0$	$y = a^3$			
$b + \sqrt{b} - 12 = 0$				
$2^{2x} - 5 \times 2^x + 4 = 0$				
$4w^4 - 13w^2 + 9 = 0$				
$9 \times 3^{2z} - 82 \times 3^z + 9 = 0$				
$6t^{2/3} - 5t^{1/3} - 4 = 0$				