

Completing the Square Codebreaker

A	B	C	D	E	F	G	H	I	J	K	L	M
$-3 \pm \sqrt{2}$	$2 \pm \sqrt{2}$	$4 \pm \sqrt{7}$	$5 \pm \sqrt{3}$	$3 \pm \sqrt{3}$	$8 \pm \sqrt{5}$	$4 \pm \sqrt{2}$	$7 \pm \sqrt{2}$	$-13 \pm \sqrt{3}$	$10 \pm \sqrt{3}$	$10 \pm \sqrt{2}$	$-2 \pm \sqrt{3}$	$-3 \pm \sqrt{7}$

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
$-4 \pm \sqrt{3}$	$12 \pm \sqrt{5}$	$7 \pm \sqrt{6}$	$-1 \pm \sqrt{2}$	$6 \pm \sqrt{5}$	$11 \pm \sqrt{3}$	$5 \pm \sqrt{7}$	$9 \pm \sqrt{3}$	$-4 \pm \sqrt{2}$	$3 \pm \sqrt{7}$	$12 \pm \sqrt{10}$	$5 \pm \sqrt{2}$	$13 \pm \sqrt{2}$

Solve each quadratic equation by completing the square, link your answers to the table above and unjumble the letters to find out how the circus had upset the human cannonball:

$x^2 - 14x + 47 = 0$	$x^2 - 6x + 6 = 0$	$x^2 - 11x + 39 = 3x - 8$	$x^2 + 6x + 7 = 0$	$x^2 - 10x + 22 = 0$

$x^2 - 4x + 11 = 9$	$x^2 - 2x + 1 = 4x - 5$	$2x^2 - 12x + 1 = -11$	$x^2 + 8x = -13$	$x^2 - 16x + 59 = 0$

$x^2 + 26x + 92 = -74$	$2x^2 - 7x + 15 = x^2 + 5x - 16$	$x(x - 6) + 14 = 8$	$x(x - 8) + 11 = 2x - 11$