Fill in the Blanks — The Discriminant

Quadratic Equation	a	b	c	Discriminant	Nature of Solutions
$x^2 + 5x + 3 = 0$	1	5	3	$5^2 - 4 \times 1 \times 3 = 13$	Two real solutions
$3x^2 - 2x + 5 = 0$	3	-2	5	$(-2)^2 - 4 \times 3 \times 5 = -56$	No real solutions
$x^2 + 4x + 4 = 0$	1	4	4	$4^2 - 4 \times 1 \times 4 = 0$	One solution
$6x^2 + 5 = 0$	6	0	5	$0^2 - 4 \times 6 \times 5 = -120$	No real solutions
$16 - x - 3x^2 = 0$	-3	-1	16	$(-1)^2 - 4 \times -3 \times 16 = 193$	Two real solutions
$9x^2 - 2x = 0$	9	-2	0	$(-2)^2 - 4 \times 9 \times 0 = 4$	Two real solutions
$5x^2 + 4x + 1 = 0$	5	4	1	$4^2 - 4 \times 5 \times 1 = -4$	No real solutions
$x^2 + 8x + 5 = 0$	1	8	5	$8^2 - 4 \times 1 \times 5 = 44$	Two real solutions
$6x^2 - 9x + 8 = 0$	6	-9	8	$(-9)^2 - 4 \times 6 \times 8 = -111$	No real solutions
$4x^2 - 12x + 9 = 0$	4	-12	9	$(-12)^2 - 4 \times 4 \times 9 = 0$	One real solution
$5x^2 + 7x - 3 = 0$	5	7	-3	$7^2 - 4 \times 5 \times -3 = 109$	Two real solutions
$-25 \pm 10x - x^2 = 0$	-1	± 10	-25	$(\pm 10)^2 - 4 \times -1 \times -25 = 0$	One real solution
$3x^2 + 6x + 5 = 0$	3	6	5	$6^2 - 4 \times 3 \times 5 = -24$	No real solutions