

Discriminant

Intro	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ <p>The Discriminant:</p> $b^2 - 4ac$	
1	<u>1 Real roots and distinct roots</u> $b^2 - 4ac > 0$	Curve cuts line at 2 points
2	<u>2 Real roots and equal roots</u> $b^2 - 4ac = 0$	Curve is at tangent at line
3	<u>3 No Real roots</u> $b^2 - 4ac < 0$	Curve is does not meet line
4	<u>4 Real roots</u> $b^2 - 4ac \geq 0$	Lines meets curve