



## Quadratic Formula - Equation and Discriminant Formula to Discriminant

|                                                                                                                                                                           |                     |                   |                                                                                                                                                                           |                     |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------|
| <b>1</b> What is the discriminant of this quadratic equation (use the discriminant formula)?<br><br>$y = +4x^2 + 3$<br>discriminant formula:<br>$\Delta = b^2 - 4ac$      | A<br>$\Delta = -48$ | B<br>$\Delta = 0$ | <b>2</b> What is the discriminant of this quadratic equation (use the discriminant formula)?<br><br>$y = +x^2 + 2$<br>discriminant formula:<br>$\Delta = b^2 - 4ac$       | A<br>$\Delta = -8$  | B<br>$\Delta = 0$ |
|                                                                                                                                                                           | C<br>$\Delta = 48$  |                   |                                                                                                                                                                           | C<br>$\Delta = 8$   |                   |
| <b>3</b> What is the discriminant of this quadratic equation (use the discriminant formula)?<br><br>$y = -5x - 3x^2 - 5$<br>discriminant formula:<br>$\Delta = b^2 - 4ac$ | A<br>$\Delta = -35$ | B<br>$\Delta = 0$ | <b>4</b> What is the discriminant of this quadratic equation (use the discriminant formula)?<br><br>$y = 5x^2 - x + 1$<br>discriminant formula:<br>$\Delta = b^2 - 4ac$   | A<br>$\Delta = -19$ | B<br>$\Delta = 0$ |
|                                                                                                                                                                           | C<br>$\Delta = 35$  |                   |                                                                                                                                                                           | C<br>$\Delta = 19$  |                   |
| <b>5</b> What is the discriminant of this quadratic equation (use the discriminant formula)?<br><br>$y = 2x^2 + x + 2$<br>discriminant formula:<br>$\Delta = b^2 - 4ac$   | A<br>$\Delta = -15$ | B<br>$\Delta = 0$ | <b>6</b> What is the discriminant of this quadratic equation (use the discriminant formula)?<br><br>$y = -x^2 - 5 + 4x$<br>discriminant formula:<br>$\Delta = b^2 - 4ac$  | A<br>$\Delta = -4$  | B<br>$\Delta = 0$ |
|                                                                                                                                                                           | C<br>$\Delta = 15$  |                   |                                                                                                                                                                           | C<br>$\Delta = 4$   |                   |
| <b>7</b> What is the discriminant of this quadratic equation (use the discriminant formula)?<br><br>$y = -3x^2 - x - 4$<br>discriminant formula:<br>$\Delta = b^2 - 4ac$  | A<br>$\Delta = -47$ | B<br>$\Delta = 0$ | <b>8</b> What is the discriminant of this quadratic equation (use the discriminant formula)?<br><br>$y = -5x^2 + 3x - 4$<br>discriminant formula:<br>$\Delta = b^2 - 4ac$ | A<br>$\Delta = -71$ | B<br>$\Delta = 0$ |
|                                                                                                                                                                           | C<br>$\Delta = 47$  |                   |                                                                                                                                                                           | C<br>$\Delta = 71$  |                   |