



## Quadratic Discriminants - Equation to Count of Roots



**1** What type of roots would this quadratic equation have?

$$y = -0.5x^2 + 2x + 3$$

A 2 complex roots

B 1 real root

C 2 real roots

**2** What type of roots would this quadratic equation have?

$$y = -1.5x^2 - 4x + 4$$

A 2 complex roots

B 1 real root

C 2 real roots

**3** What type of roots would this quadratic equation have?

$$y = x^2 - 2$$

A 2 complex roots

B 1 real root

C 2 real roots

**4** What type of roots would this quadratic equation have?

$$y = 0.5x^2 + 2x + 2$$

A 2 complex roots

B 1 real root

C 2 real roots

**5** What type of roots would this quadratic equation have?

$$y = x^2 + 4x - 3$$

A 2 complex roots

B 1 real root

C 2 real roots

**6** What type of roots would this quadratic equation have?

$$y = x^2 + 1$$

A 2 complex roots

B 1 real root

C 2 real roots

**7** What type of roots would this quadratic equation have?

$$y = -0.5x^2 + 4x + 1$$

A 2 complex roots

B 1 real root

C 2 real roots

**8** What type of roots would this quadratic equation have?

$$y = -1.5x^2 + 3x$$

A 2 complex roots

B 1 real root

C 2 real roots