

# Quadratic Equations Solve Using the Quadratic Formula

Use the Quadratic Formula to solve the following equations. Show all working out in your exercise book. Find the correct solution to each of the problems in the options available. Once found, locate the question number on the following page and shade in the area with the solution's corresponding color.

| Question # |                      |
|------------|----------------------|
| 1          | $x^2 - 5x - 14 = 0$  |
| 2          | $2x^2 + 2x - 12 = 0$ |
| 3          | $x^2 + 4x + 3 = 0$   |
| 4          | $2x^2 + 3x - 20 = 0$ |
| 5          | $2x^2 - 7x - 5 = 0$  |
| 6          | $x^2 - 4x + 4 = 0$   |
| 7          | $x^2 - 4x - 7 = 0$   |
| 8          | $x^2 + 4x + 2 = 0$   |
| 9          | $x^2 - 5x - 5 = 0$   |
| 10         | $2x^2 - 4x + 1 = 0$  |
| 11         | $2x^2 - 3x - 5 = 0$  |
| 12         | $x^2 - 4x - 4 = 0$   |
| 13         | $x^2 - 3x + 2 = 0$   |
| 14         | $x^2 - 4x + 3 = 0$   |
| 15         | $x^2 + 2x + 1 = 0$   |

|           |                     |                    |                      |                  |                                |                                          |                         |                              |                              |                          |                                |                                   |                                          |                      |                                |
|-----------|---------------------|--------------------|----------------------|------------------|--------------------------------|------------------------------------------|-------------------------|------------------------------|------------------------------|--------------------------|--------------------------------|-----------------------------------|------------------------------------------|----------------------|--------------------------------|
| Solutions | $\{-3, -1\}$ (pink) | $\{1, 2\}$ (green) | $\{-1\}$ (dark blue) | $\{2\}$ (yellow) | $\{-1, \frac{2}{5}\}$ (yellow) | $\{\frac{5 \pm 3\sqrt{5}}{2}\}$ (purple) | $\{1, 3\}$ (light blue) | $\{2 \pm \sqrt{2}\}$ (green) | $\{2 \pm \sqrt{11}\}$ (pink) | $\{-3, 2\}$ (light blue) | $\{-2 \pm \sqrt{2}\}$ (purple) | $\{-4, \frac{5}{2}\}$ (dark blue) | $\{\frac{7 \pm \sqrt{89}}{4}\}$ (maroon) | $\{-2, 7\}$ (yellow) | $\{2 \pm 2\sqrt{2}\}$ (maroon) |
|-----------|---------------------|--------------------|----------------------|------------------|--------------------------------|------------------------------------------|-------------------------|------------------------------|------------------------------|--------------------------|--------------------------------|-----------------------------------|------------------------------------------|----------------------|--------------------------------|

