

Answer key

Use factoring or the quadratic formula to solve each equation.

1. $v^2 + 2v - 8 = 0$ $v = -4, 2$

2. $2a^2 - a - 13 = 2$ $a = -\frac{5}{2}, 3$

3. $b^2 - 4b - 12 = 0$ $b = -2, 6$

4. $8n^2 - 4n = 18$ $n = \frac{1 \pm i\sqrt{37}}{4}$

5. $10x^2 + 9 = x$ $x = \frac{1 \pm i\sqrt{359}}{20}$

6. $3a^2 = 6a - 3$ $a = 1$

7. $14m^2 + 1 = 6m^2 + 7m$ $m = \frac{7 \pm \sqrt{17}}{16}$

8. $n^2 = 9n - 20$ $n = 4, 5$

9. $9x^2 - 6x - 11 = 0$ $x = \frac{1 \pm 2\sqrt{3}}{3}$

10. $4a^2 - 8 = a$ $a = \frac{1 \pm \sqrt{129}}{8}$