Using the quadratic formula: questions

Tom Coleman

Summary

A selection of questions on using the quadratic formula.

Before attempting these questions, it is recommended that you read (Guide: Using the quadratic formula).

Questions

1

Using the quadratic formula or otherwise, solve the following quadratic equations.

1.1 $x^2 - 7x + 6 = 0$.

1.2. $x^2 + 14x + 45 = 0$.

1.3. $x^2 - x - 56 = 0$.

1.4. $s^2 + 4s + 4 = 0$.

1.5. $t^2 + 4t - 4 = 0$.

1.6. $m^2 - 144 = 0$.

1.7. $5c^2 - 25 + 30 = 0$.

1.8. $2n^2 + n + 1 = 0$.

1.9. $-3c^2 + 9c - 1 = 0$.

1.10. $\frac{x^2}{2} - \frac{7x}{2} + 3 = 0$.

2

Although it may not look like it, the following equations are quadratics. Solve these for the variable indicated.

2.1 $x^2 - 7x + 6 = 0$.

2.2. $x^2 + 14x + 45 = 0$.

2.3. $x^2 - x - 56 = 0$.

2.4. $s^2 + 4s + 4 = 0$.

2.5. $t^2 + 4t - 4 = 0$.

2.6. $m^2 - 144 = 0$.

2.7. $5c^2 - 25 + 30 = 0$.

2.8. $2n^2 + n + 1 = 0$.

2.9. $-3c^2 + 9c - 1 = 0$.

2.10. $\frac{x^2}{2} - \frac{7x}{2} + 3 = 0$.

3