## Using the quadratic formula: questions

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## 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.

1

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

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.  $m^2 144 = 0$ .
- $2.7. \ 5c^2 25 + 30 = 0.$
- $2.8. \ 2n^2 + n + 1 = 0.$
- $2.9. -3c^2 + 9c 1 = 0.$
- $2.10. \ \frac{x^2}{2} \frac{7x}{2} + 3 = 0.$

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