

LESSON
9-9**Methods of Solving Quadratic Equations**

METHOD	ADVANTAGES	DISADVANTAGES
Graphing	<ul style="list-style-type: none">• Always works to give approximate solutions• Can quickly see the number of solutions	<ul style="list-style-type: none">• Cannot always get an exact solution
Factoring	<ul style="list-style-type: none">• Good method to try first• Straightforward if the equation is factorable	<ul style="list-style-type: none">• Complicated if the equation is not easily factorable• Not all quadratic equations are factorable.
Using square roots	<ul style="list-style-type: none">• Quick when the equation has no x-term	<ul style="list-style-type: none">• Cannot easily use when there is an x-term
Completing the square	<ul style="list-style-type: none">• Always works	<ul style="list-style-type: none">• Sometimes involves difficult calculations
Using the Quadratic Formula	<ul style="list-style-type: none">• Always works• Can always find exact solutions	<ul style="list-style-type: none">• Other methods may be easier or less time consuming.

Solve using any method.

1. $x^2 - 64 = 0$

2. $x^2 + 12x + 36 = 0$

3. $x^2 + 4x - 32 = 0$

4. $2x^2 + 9x - 5 = 0$

5. $x^2 + 8x + 15 = 0$

6. $x^2 - 49 = 0$

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7. $6x^2 + x - 1 = 0$

8. $x^2 + 8x - 20 = 0$

9. $x^2 + 25 = 0$

10. $x^2 - 11x + 28 = 0$

11. $x^2 + 8x + 16 = 0$

12. $x^2 + 3x + 5 = 0$

13. $x^2 + 10x + 25 = 0$

14. $x^2 - 6x - 7 = 0$

