© 2025 Kuta Software LLC. All rights reserved.

8.1 Solve Quadratics By Factoring #1

Date_____

For questions 1 -10, write the quadratic equation in standard form. For questions 11-20, solve the quadratic equation.

1) $x^2 = 5x$

2) $x^2 - 2x = 0$

3) $x^2 = -10x - 16$

4) $a^2 = 2 - a$

5) $x^2 - 4 = 3x$

6) $k^2 - 7k = 8$

7) $b^2 + 5b + 9 = 3$

8) $b^2 + 11b + 24 = -4$

9) $n^2 - 8n + 10 = 3$

10) $x^2 - 15x + 64 = 8$

© 2025 Kuta Software LLC. All rights reserved. Made with Infinite Algebra 1.

11) $r^2 - 8r + 12 = 0$

12) $n^2 - 9n + 14 = 0$

13) $x^2 - 14x + 48 = 0$

14) $a^2 - 10a + 21 = 0$

15) $p^2 + 4p + 4 = 0$

16) $k^2 - 7k + 12 = 0$

17) $k^2 + 5k = 0$

18) $k^2 - 3k - 40 = 0$

19) $k^2 - 13k + 42 = 0$

20) $a^2 + 5a - 6 = 0$

21) $b^2 - b - 30 = 0$

22) $a^2 - 5a - 24 = 0$

© 2025 Kuta Software LLC. All rights reserved.

Made with Infinite Algebra 1.

© 2025 Kuta Software LLC. All rights reserved.

8.1 Solve Quadratics By Factoring #1

Date_____

For questions 1 -10, write the quadratic equation in standard form. For questions 11-20, solve the quadratic equation.

1) $x^2 = 5x$

$\{5, 0\}$

2) $x^2 - 2x = 0$

$\{2, 0\}$

3) $x^2 = -10x - 16$

$\{-2, -8\}$

4) $a^2 = 2 - a$

$\{-2, 1\}$

5) $x^2 - 4 = 3x$

$\{4, -1\}$

6) $k^2 - 7k = 8$

$\{-1, 8\}$

7) $b^2 + 5b + 9 = 3$

$\{-2, -3\}$

8) $b^2 + 11b + 24 = -4$

$\{-4, -7\}$

9) $n^2 - 8n + 10 = 3$

$\{7, 1\}$

10) $x^2 - 15x + 64 = 8$

$\{7, 8\}$

© 2025 Kuta Software LLC. All rights reserved. Made with Infinite Algebra 1.

11) $r^2 - 8r + 12 = 0$

$\{6, 2\}$

12) $n^2 - 9n + 14 = 0$

$\{7, 2\}$

13) $x^2 - 14x + 48 = 0$

$\{6, 8\}$

14) $a^2 - 10a + 21 = 0$

$\{7, 3\}$

15) $p^2 + 4p + 4 = 0$

$\{-2\}$

16) $k^2 - 7k + 12 = 0$

$\{3, 4\}$

17) $k^2 + 5k = 0$

$\{-5, 0\}$

18) $k^2 - 3k - 40 = 0$

$\{8, -5\}$

19) $k^2 - 13k + 42 = 0$

$\{6, 7\}$

20) $a^2 + 5a - 6 = 0$

$\{1, -6\}$

21) $b^2 - b - 30 = 0$

$\{-5, 6\}$

22) $a^2 - 5a - 24 = 0$

$\{-3, 8\}$

© 2025 Kuta Software LLC. All rights reserved. Made with Infinite Algebra 1.