Solving Quadratics Quiz Review CYU

☑ Use when you get it right all by yourself

 ${m S}$ Use when you did it all by yourself, but made a silly mistake

HUse when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

NUse when a question was not even attempted

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|-----------------------|-------|--------------|----------|
| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
| Square Root Method | 1, 2 | 3, 4 | |
| Completing the Square | | 5, 6 | 7, 8 |
| Quadratic Formula | 9 | 10 | 11, 12 |
| Factoring | 13 | 14, 15 | 16 |
| Solving quadratics | | 17 | 18 - 20 |

Show all work to earn full credit. Follow the directions when solving to earn full credit for the correct method

1-4: Use the **square root** method to solve each equation.

1.
$$x^2 - 10 = 0$$

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

3.
$$(x-1)^2 = 8$$

4.
$$(x + 5)^2 = 12$$

<u>5 – 8: Solve each equation by **completing the square**.</u>

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

$$6. x^2 - 12x + 11 = 0$$

7.
$$3x^2 + 3x = 5$$

8.
$$16y^2 + 16y = 1$$

9 – 12: Use the quadratic formula to solve each equation.

9.
$$2x^2 - 4x + 1 = 0$$

$$\overline{10.\frac{1}{2}x^2 + 3x + 2} = 0$$

11.
$$x^2 + 4x = -7$$

12.
$$x^2 + x = -3$$

<u>13 – 16: Solve each equation by **factoring**.</u>

13.
$$x^2 + 3x + 6 = 0$$

$$14.2x^2 + 18 = 0$$

15.
$$x^2 + 17x = 0$$

16.
$$4x^2 - 2x - 3 = 0$$

17 – 20: Solve each equation using the **method of your choice.**17. $(x-2)^2 = 27$ 18. $\frac{1}{2}x^2 - 2x + \frac{1}{2} = 0$

17.
$$(x-2)^2 = 27$$

$$18.\frac{1}{2}x^2 - 2x + \frac{1}{2} = 0$$

19.
$$x(x-2) = 5$$

20.
$$2x^2 = -5x - 1$$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

