

Name _____

Score _____

Solve by completing the square.

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

2. $w^2 - 2w - 15 = 0$

3. $z^2 - 4z + 4 = 0$

1. _____

2. _____

3. _____

* 10. $y^2 - 7y + 12 = 0$

11. $y^2 - 9y + 18 = 0$

12. $x^2 + 4x - 16 = 0$

10. _____

11. _____

12. _____

16. **FAKE FACTOR**
 $2x^2 - 5x - 12 = 0$

17. $x^2 = 10x + 24$

18. $x^2 = 6x + 16$

16. _____

17. _____

18. _____

19. $z^2 = 4z + 5$

20. **FAKE FACTOR**
 $10x^2 - 9x + 2 = 0$

19. _____

20. _____

Solve by using the quadratic formula.

Additional Objective 8.2.2 Exercises

1. $w^2 = 5w + 50$

2. $t^2 = 3t + 40$

3. $x^2 = 9 - 8x$

1. _____

2. _____

3. _____

4. $2x^2 - 5x + 6 = 0$

5. $8x^2 + 10x = 3$

6. $6x^2 + 7x - 3 = 0$

4. _____

5. _____

6. _____

Solve by using the quadratic equation. Approximate solutions to the nearest thousandths.

19. $p^2 - 6p + 2 = 0$

20. $w^2 - 8w + 3 = 0$

21. $r^2 - 7r + 4 = 0$

19. _____

20. _____

21. _____

Use the discriminant to determine whether the quadratic equation has one real number solution, two real number solutions, or two complex number solutions.

22. $9x^2 + 30x + 25 = 0$

23. $2p^2 + 7p + 3 = 0$

24. $3z^2 + 1 = 0$

22. _____

23. _____

24. _____