

Algebra 2**CW: Solving Quadratic Equations by Factoring**

Name _____

Date _____ Block _____

Solve each equation by factoring.

1. $x^2 - 4x - 12 = 0$

2. $x^2 - 16x + 64 = 0$

3. $x^2 - 20x + 100 = 0$

4. $x^2 - 6x + 8 = 0$

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

6. $x^2 - 9x + 14 = 0$

7. $x^2 - 4x = 0$

8. $7x^2 = 4x$

9. $x^2 + 25 = 10x$

10. $10x^2 = 9x$

11. $x^2 = 2x + 99$

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

13. $5x^2 - 35x + 60 = 0$

14. $36x^2 = 25$

15. $2x^2 - 8x - 90 = 0$

16. $3x^2 + 2x - 1 = 0$

17. $6x^2 = 9x$

18. $3x^2 + 24x + 45 = 0$

19. $15x^2 + 19x + 6 = 0$

20. $3x^2 - 8x = -4$

21. $6x^2 = 5x + 6$

Write a quadratic equation with the given roots. Write the equation in the form $ax^2 + bx + c = 0$, where a , b , and c are integers.

22. 7, 2

23. 0, 3

24. -5, 8

25. -7, -8

26. -6, -3

27. 3, -4

28. 1, $\frac{1}{2}$

29. $\frac{1}{3}$, 2

30. 0, $-\frac{7}{2}$

31. $\frac{1}{3}$, -3

32. 4, $\frac{1}{3}$

33. $-\frac{2}{3}$, $-\frac{4}{5}$