

A. Perform the indicated operations.

1. $\sqrt{-540}$

2. $\frac{4}{6+\sqrt{2}}$

3. $\sqrt{8} \cdot \sqrt{54}$

4. $\frac{6\sqrt{6}}{\sqrt{12}}$

5. $\frac{1}{4}(24-8i)-5(-3+7i)$

6. $(2-3i)(-5+4i)$

7. $\frac{9-6i}{3i}$

8. $\frac{5+3i}{2+i}$

B. Solve by factoring.

9. $2x^2 + 5x = -3$

10. $2x^2 = 7x$

11. $5x^2 = 15x + 20$

C. Solve using square roots.

12. $\frac{1}{3}x^2 + 9 = 6$

D. Solve by completing the square.

13. $x^2 + 8x = -3$

14. $x^2 - 16x + 92 = 0$

E. Solve by the quadratic formula.

15. $3x^2 = 5x - 7$

16. $2x^2 + 5 = 11x$

17. $2x^2 + x - 21 = 0$

E. Find the value of the discriminant. WITHOUT SOLVING, fully describe the roots.

18. $4x^2 - 8x + 4 = 0$

19. $4x^2 + 3x + \frac{5}{16} = 0$

20. $3x^2 + 4x = 5$

F. Solve by any method.

21. $8x^2 - 5 = 6x$

22. $x^2 - 9 = 0$

23. $x^2 = 3x$

24. $\frac{5}{2}(x-5)^2 - 17 = 73$

25. $x^2 + 18x + 81 = 0$

26. $3x^2 - 24x - 48 = 0$

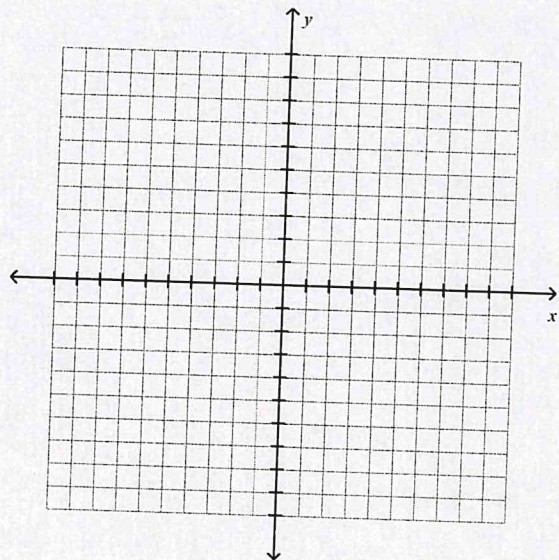
27. $x^2 - 10x + 3 = 0$

28. $5x^2 + 2x + 5 = 0$

Name: _____ Class: _____ Date: _____

Algebra 2 CP Chapter 5 Review #2

1. Graph $y \geq (x+4)^2 - 3$.



2. Graph $y < -x^2 + 6x - 2$.

