

Simplify the square root. Leave your answer in simplest radical form. (No decimals).

1. $\sqrt{18}$

2. $\sqrt{44}$

3. $\sqrt{121}$

4. $3\sqrt{75}$

5. $5\sqrt{32}$

6. $4\sqrt{49}$

Find the value of "c" that makes the expression a perfect square trinomial.

Then write the expression as a square of a binomial.

7. $x^2 + 12x + c$

8. $x^2 - 20x + c$

9. $x^2 + 10x + c$

10. $x^2 - 14x + c$

11. $x^2 + 5x + c$

12. $x^2 - 9x + c$

Solve. Leave your answer in simplest radical form.

13. $x^2 - 100 = 0$

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

15. $x^2 - 4x = 5$

16. $3x^2 - 8x = -4$

$$17. x^2 + 12x = -36$$

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

$$19. (x - 9)^2 = 49$$

$$20. x^2 - 9x = 0$$

$$21. 3x^2 + 2x - 1 = 0$$

$$22. x^2 + 1 = -4x$$

$$23. 3x^2 = 48$$

$$24. x^2 + 20x + 100 = 5$$

$$25. x^2 + 12x + 4 = 0$$

$$26. x^2 + 25 = 10x$$

$$27. 15x^2 + 19x = -6$$

$$28. 2x^2 - 13x = 7$$

$$29. x^2 + 21 = -10x$$

$$30. x^2 + 3x - 8 = 0$$