

Solving Quadratic Functions Class Work

🦋 **Objective:** You will be able to solve and check your solutions to quadratic functions.

★ With a partner, solve each equation:

a. $2x^2 = 200$

b. $(x - 4)(x + 3) = 0$

- ★ Some ways of solving quadratic functions involve...
- using square roots, if possible
 - factoring, and applying the zero product property

★ Your goal today is to manipulate quadratic equations so that they are in a solvable form (like the examples a and b).

Always remember to

Practice: Solve and check your solution to each quadratic equation.

1. $-3x^2 = -27$

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

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

4. $\frac{1}{2}x^2 - 36 = 0$

5. $2x^3 - 50x = 0$

6. $3x^4 = 27x^2$

7. $12x^2 - 25x = -12$

8. $2x^2 = 90$

9. $3x^2 = 240$

10. $3x^3 - 3x^2 = 396x$

11. $8x^2 - 26x = -6$

12. $3x^3 - 13x^2 - 10x = 0$

13. $36 = 3x^2$

14. $4x^2 - 28x = -49$

15. $4x^2 - 96 = 0$

16. $x^2 = 2x - 1$

17. $x^2 = 108$

18. $121x^2 = 154x - 49$

19. $8x^2 = 1000$

20. $24x^2 + 6x - 45 = 0$

Option 1: **Write down any important reminder regarding solving quadratic equations.**

AND / OR

Option 2: **Write down any questions you have regarding solving quadratic equations.**

AND / OR

Option 3: **Create ay quadratic equation and solve it.**

AND / OR

Option 4: **Complete the metaphor:**

Solving quadratic equations is like _____,
because _____.