Pract. Test Name _____

Quad. Eqns. Name _____

1. ***Write the General Form of the Quadratic Equation.

2. ***Write the procedure for solving quadratic equations using the Zero Product Property

3. ***Write the Quadratic Formula

4. ***Write the formula for the discriminant and explain how it is used to determine the number and nature of the roots

5. ***Write the procedure for solving equations using the Quadratic Formula

6. ***How was the Quadratic Formula derived?

7. **Solve for x by the Zero Product Property. $x^2 + 7x + 12 = 0$

8. **Solve for x by the Zero Product Property. $x^2 - 35 = 2x$

9. **Solve by the Zero Product Property $6x^2 + 10x = 4$

10. **Solve for x using the $x^2 = n$, Method. $x^2 = 49$

11. **Solve for x using the $x^2 = n$ Method. $x^2 = 50$

12. **Solve for x using the $x^2 = n$ Method $(x - 4)^2 = 18$

13. **Solve for x by Completing the Square. $x^2 + 6x - 11 = 0$

14. **Solve for x by Completing the Square. $x^2 + 10x = 3$

15. **Solve by Completing the Square. $2x^2 + 12x = -16$

16. **Solve using the Quadratic Formula. $2x^2 + 3x - 5 = 0$

17. **Solve Using the Quadratic Formula. $x^2 + x = 12$

18. *ACT/SAT The base of a trapezoid measures 5 cm. more than the other, while the height is 4/5 as long as the longer base. Find the lengths of the bases if the area is 100 sq. cm.

19. *ACT/SAT From a rectangular sheet of metal 20 in. long and 12 in. wide an open rectangular box is made by cutting squares of equal areas from the four corners and folding up the ends. If the area of the base of the box is 112 sq. in., find the total area of the discarded squares.

20. ***Provide contact information for a parent/guardian; phone, cell phone email or home address (CHP).