

Algebra 2
Chapter 5 / Quadratics Unit Review

8. We learned 3 methods for factoring. Name them. BOX

FRACTIONS

GROUPING

There is one thing that must be found no matter which method you choose for factoring.

What is it? winning combo of $\frac{ac}{b}$

9. When you solve a quadratic equation, or any equation for that matter, you are finding its solutions. What are the other names we use for solutions? (There are three)

roots, zeros, x-ints (from #)

10. Fill in the table below about our 5 methods for solving quadratic equations.

Method	When to Use	Advantages	Disadvantages
Factoring	Standard Form + Factorable	Easy if $a=1$ Gives Exact answers	Not as easy when $a \neq 1$ Need to know times tables
$\sqrt{\quad}$'s	Vertex Form or Standard when $b=0$	- Not too hard to solve working backwards Gives exact answers	you have to know how to simplify $\sqrt{\quad}$'s
QF	Standard Form	- It works with factorable + unfactorable - Gives exact answers	- You have to memorize it - Not easy to use
CTS	Standard Form	Easy under right circumstances $a=1$, b = even # - Gives exact answers	can be tough when $a \neq 1$ b = odd
Graphing	Any Form $= 0$	The calculator does all the work - 2nd trace 5 enter 3x	Does not give exact answers (no radicals)