Algebra II Notes 9/25/18

Solving Quadratic Equations by Factoring

As you come in, find your new team. Your team has been assigned one problem from the homework to do on your team’s white board(s). First, do the warm-up to the best of your ability. Then move right into the assigned problem. Show your work! Ms. Burchfield will go over the warm-up, and then you will need to present your team’s work.

Warm-up:

Sort the steps for factoring quadratics, listed below, into the CORRECT order in your notebook:

* Find factors of c that sum to b.
* Write the quadratic expression as a product using parentheses:
  + (variable + factor of c)(variable + factor of c)
* Check that the expression is in the form ax2 + bx + c AND that a = 1.
* Find the GCF and write the expression as a product of the GCF and a second factor.
* Don’t forget to write the GCF in front of your fully factored form!

Now, make sure you and your team can all explain the work for your assigned problem. Take any notes you need from your classmates’ work in your notebook.

You may notice that all the problems assigned were factoring problems. Factoring can be used to **solve** equations; that is, to find values of the variable that make an equation true. Below is #11 from the homework:



We will solve this problem together, while listing the steps. Take notes in your notebook! Remember that since we’re using factoring, ALL the factoring steps will also apply.

Here are two more problems to do:

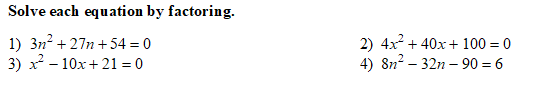




Now start the classwork/homework.

Exit ticket: Identify ONE problem we covered today that you can solve step-by-step, and show all the work for that problem on your exit ticket.

Classwork/homework:

https://www.khanacademy.org/math/algebra/quadratics/solving-quadratic-equations-by-factoring/a/solving-quadratic-equations-by-factoring