

Unit 7 - Systems of Equations

- **General Reminders**
 - Read and annotate the whole question. You might want to highlight the question.
 - Always put your answer in an ordered pair unless you need to put it in the context of the problem.
 - For word problems, label what your variables mean.
 - You can CHECK your answers! Plug them back in and make sure that they work.
 - It might help to write the method you are using on your paper.
 - USE PENCIL - mistakes are okay as long as you can fix them
 - Make sure your work is neat so Ms. Barger can give you credit for using the correct method
- **Elimination**
 - Make sure the variables line up
 - Make sure that two of the same variables have the same, but opposite coefficient (like $3x$ and $-3x$)
 - Add the two equations together and find the first variable
 - Substitute your found variable into the equation to find the other variable
 - Make sure you have answered the question that the problem asked
- **Substitution**
 - Solve one equation for a variable
 - Substitute the value of that variable into the second equation
 - Solve for that variable
 - Plug in your solution to either of the original equations and solve for the second variable
 - Make sure you have answered the question that the problem asked
- **Graphing**
 - Put your equations both into slope intercept form
 - Graph both equations
 - Find the intersection of the lines
 - Make sure you have answered the question that the problem asked
- **Word problems**
 - Read the problem
 - Underline the question
 - Define your variables
 - Write your equations
 - Solve using the method that makes the most sense to you in the situation
- **“How Many Solutions?” problems**
 - Solve using the method that they asked you to use. If no method is specified, use the method that makes the most sense
 - If you get a point as your answer, you have ONE SOLUTION
 - If you get a true statement for your answer (such as $3=3$ or $0=0$), you have INFINITELY MANY SOLUTIONS
 - If you get a false statement for your answer (such as $4=0$), you have NO SOLUTION
- **ANSWERS**