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| **Translating Word Problems into Equations** |
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| Most of the time when someone says “word problems” there is automatic panic. But word problems do not have to be the worst part of a math class. By setting up a system and following it, you can be successful with word problems. So what should you do? Here are some recommended steps: 1. Read the problem carefully and figure out what it is asking you to find.

Usually, but not always, you can find this information at the end of the problem. 1. Assign a variable to the quantity you are trying to find.

Most people choose to use x, but feel free to use any variable you like. For example, if you are being asked to find a number, some students like to use the variable n. It is your choice. 1. Write down what the variable represents.

At the time you decide what the variable will represent, you may think there is no need to write that down in words. However, by the time you read the problem several more times and solve the equation, it is easy to forget where you started. 1. Re-read the problem and write an equation for the quantities given in the problem.

This is where most students feel they have the most trouble. The only way to truly master this step is through lots of practice. Be prepared to do a lot of problems.1. Solve the equation.

The examples done in this lesson will be linear equations. Solutions will be shown, but may not be as detailed as you would like. If you need to see additional examples of linear equations worked out completely, click here. (link to linear equations solving.doc) 1. Answer the question in the problem.

Just because you found an answer to your equation does not necessarily mean you are finished with the problem. Many times you will need to take the answer you get from the equation and use it in some other way to answer the question originally given in the problem. 1. Check your solution.

Your answer should not only make sense logically, but it should also make the equation true. If you are asked for a time value and end up with a negative number, this should indicate that you’ve made an error somewhere. If you are asked how fast a person is running and give an answer of 700 miles per hour, again you should be worried that there is an error. If you substitute these unreasonable answers into the equation you used in step 4 and it makes the equation true, then you should re-think the validity of your equation.  |

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