

Lillian M. Jacobs 3rd Grade Math League
PROBLEM SOLVING TECHNIQUES

Here are some hints on how to solve Word Problems:

1. Be neat and clean.
2. Show your work. Use the blank, opposite page to write out your answers.
3. Read the Problem and Understand the Question. Give the answer to the question being asked.
4. Break down the problem into smaller easier questions.
5. Use abbreviations to avoid writing unnecessarily. Mathematicians are neat but they are also efficient.
6. Double Check your work by plugging in your answers to see if it works.
7. Use the proper Problem Solving Device to help you. Examples of Problem Solving Devices include:
 - a. Labeling Spaces to find out the number of shapes (triangles, squares etc.) within a shape
 - b. Using "Tables" with Columns and Rows
 - c. Drawing Diagrams to represent the situation.

You can always demonstrate Hints #1 & #2, but below are examples of other hints.

Example of using Tip 3 Read the Problems and Understand the Question. Give the answer to the question being asked.

In Mr. Bartley's 3rd grade class there are 14 boys and 9 girls. Last Friday 4 boys and 2 girls were absent. Last Friday there were _____ more boys than girls.

Mr. Bartley's Class at:	Boys	Girls	Difference between Boys and Girls
Full Attendance	14	9	
Boys and Girls absent last Friday	-4	-2	
Actual Attendance Last Friday	10	7	3

The Question was to find the Difference between the Boys and Girls.

This is also a good example of 7b Using Tables with Columns and Rows to show your work.

Example of using Tip 4 – break down the problem into smaller, easier questions

Andrea baked cookies that looked like circles, rectangles and triangles. She made two more rectangle cookies than circle cookies. She made 4 less triangle cookies than circle cookies. She made 16 circle cookies. What was eh total number of cookies that Andrea baked?

Type of Cookie	Facts & Formulas	Number of Cookies
Circle Cookies	16	16

Rectangle Cookies	2 more than Circle	18
Triangle cookies	4 less than Circle	12
	Total Cookies	46

The number of each type of cookie is easy to figure out if you break down this problem using all the available Facts and Formulas. There are actually 2 easier math formulas you need to be the answer. This is yet another good example of 7b – Using tables with Columns and Rows to show your work.

Also you should always **Double Check** your work.