



LOOK FOR ENTRY POINTS
TO THE PROBLEM

More than likely, when you think back on how you learned math, you remember learning one “right” way to solve a problem. Therefore, it might be different to see your child learning about more than one way to solve a particular math problem. Here’s what we know: every child learns differently, and it is important for students to learn that there is more than one way to arrive at a solution. Allowing them time to do this helps students better understand a concept and make sense of *why* a certain way of solving works.

Students can look for ways to solve a problem by

- reading the problem and asking themselves what they are being asked to solve;
- asking themselves, *What are some different ways that I could solve this problem?* and
- considering whether they have seen a problem like this before, and if so, how they solved it.

Example:

Sarah wants to buy a new outfit. She has \$100 to spend. The shirt she would like costs \$30, and the pants cost \$45. If tax is 5%, how much will the outfit cost?

Possible Ways to Solve the Problem (entry points to finding a solution)	
<p>A) Add the costs of the shirt and pants together. $\\$30 + \\$45 = \\$75$</p> <p>Figure out what 5% of 75 is: <i>I know that 10% would be \$7.50, so 5% would be half of that. Half of \$7.50 is \$3.75.</i></p> <p>$\\$75 + \\$3.75 = \\$78.75$</p>	<p>B) Add the costs of the shirt and pants together. $\\$30 + \\$45 = \\$75$</p> <p>To find the tax of 5%, use the decimal form of 5% and the standard multiplication algorithm: $\\$75 \times .05 = \\3.75</p> <p>$\\$75 + \\$3.75 = \\$78.75$</p>

Both of the examples above arrive at the same solution. However, each example finds the total tax using a different entry point.

How You Can Help Your Child with This Strategy at Home

1. Discuss with your child the different ways that you can solve various math problems (for example, totaling the cost of groceries at the store, budgeting for household items, figuring out the distance to somewhere or the amount of time it takes to get there).
2. Have your child explain several different ways they could solve a certain math problem. Then, have them tell you which one makes the most sense to them. *Support them if they get stuck!*
3. Do *mental math* with your child. This simply means, do math with your child that they can do in their head, without paper and pencil. This helps to create flexibility in how they think about numbers.