

10n1 Problem Solving Strategy

"See, Read and Explode"- a famous Red Sox Batting Coach's instructions.

Problem Solving reaches a far greater realm than just math. Problems include any kind of challenge, enigma or obstacle that stands in your way. If you know how to approach, analyze and resolve problems consistently, creatively, evenhandedly and thoroughly you will be way ahead of the game. In fact, this skill alone can make you a leader in any situation. So, learn this simple step-by-step approach to problems and own it!

Step 1- Stop, read and analyze the whole problem carefully, underlining key words such as, 'cannot be', 'consecutive', 'could be', 'digits', 'distinct', 'except', 'must be', etc. Step back, use common sense and ask yourself, "What is going on here?" or "What is this problem about?"

Step 2- Plan how to solve the problem. Problems usually can be solved by various methods. Your job is to evaluate and decide the most efficient method for you with this problem at this time. <u>This does not involve</u> <u>number crunching!</u> Look for short cuts whenever possible.

- Diagram your plan, at least mentally.
- Recognize and lay out a pattern; then plug into it.
- Eyeball figures and guesstimate.
- Guess and Check.
- Plug in answers backward.
- Try using easy numbers for variables.
- If you are dealing with % changes try starting with 100.
- When in doubt, do/ draw out patterns/ figures

Step 3- Crunch the numbers and solve the problem, precisely and meticulously. Remember to simplify by canceling, etc.

Step 4- To avoid careless mistakes <u>always double check</u> <u>two things:</u>

Did I answer the right question?
Did I do my math correctly?