

Problem Solving Strategies

Guess and Check

It's not Mr. H's favorite but hey... IT WORKS... at least sometimes.

Draw a Diagram

A picture can help a LOT, even if you don't think it's really necessary.

Translate It Into "MathSpeak"

Example: "Joe has three less than twice what Sally has" ... translates to

$$J = 2S - 3$$

Math is a language that's easy to learn.

Eliminate Possibilities

Make a list of all possible answers and then try to rule out the ones that won't work.

Look For A Pattern

Is this problem like others you've done before? Can you follow the same pattern to solve it?

Break It Up Into Pieces

*Divide a big problem up
into several little ones.
Solve it one piece at a time.*

Work Backwards

*If the answer's available,
start there and work backwards
to see "how they got it".*

Use Unit Analysis

*Always include the units in your
equations. They'll help you know
when you make silly mistakes.*

Solve An Easier Related Problem

*Think of a problem that's similar,
but easier. It might give you
clues how to solve the harder one.*

Solve The Complimentary Problem

*If you can't prove that
something is true, try to prove
that it ISN'T true.*