

Problem Solving Strategies

1. **DRAW A DIAGRAM**

- i. Drawing a diagram clarifies the problem and allows you to see the situation that you are dealing with and what shapes (and therefore formulas) you should start thinking about.

2. **Write down everything you know and DON'T know yet**

- i. Similar to drawing a picture, if you are unsure where to go with the question, writing down everything you know and everything you need to find will help you narrow down the list of formulas that you can use which will give your solution a direction.

3. **Write your formulas down as you use them**

- i. This strategy helps you keep track of what you are doing. And what you are actually solving for which will help you stay organized and limit error.

4. **Stay organized**

- i. Your math work should look like your art work. Draw your diagrams accurately, write your solution in neat columns. You and I should both be able to follow the steps you took from step 1 to the last step.

5. **Use a tool**

- i. Use a table, a chart, a mathematical tree, etc. to simplify the problem and show the pattern.

6. **Do something**

- i. Anything. Just try something. If you are stuck staring at the page will not help you get unstuck. It won't. Guaranteed. So try something – do these strategies – if you are still stuck – Attempt something.