# Formal steps in problem solving

There are many models that can be followed in order to successfully solve problems. Most models are similar and involve following a number of steps.

Problem-Solving Model

1. Identify the problem
   - What is the current situation/problem?
   - What is the problem to be solved?
2. Analyze the problem
   - What do we know already about the situation/problem?
   - What are our assumptions?
   - What is the knowledge base of the person for whom we're trying to problem-solve? What can or do they understand?
   - What don't we know yet about the whole situation/problem?
3. Brainstorm ideas
   - List all possible ideas to solve the problem.
   - No value judgment is to be passed on any suggestions.
   - The more ideas, the better.
4. Prioritize ideas
   - Establish pros and cons of each suggestion in step 3.
   - Rank the suggested ideas from step 3 according to set criteria.
5. List the steps to be taken following the chosen solution
   - What are the steps/instructions we should take according to the top solution ranked in step 4?
   - Will these steps/instructions be understood according to the knowledge base established in step 2?
6. Evaluate/test the solution
   - Do we have the desired results after following the steps in step 5?
   - Does the solution satisfy the needs of the person with the problem?
   - What are some of the areas that are not correct/satisfactory?
     (back to step 1)