

Phoenix list - Developed by CIA to help solve problems.

The problem

Why is it necessary to solve this problem?
What benefits will I receive when I solve this problem?
What is the unknown?
What is it you don't understand yet?
What is the information you have?
Is the information sufficient? Or redundant? Or contradictory?
What isn't the problem?
Should you draw a diagram of the problem?
Where are the boundaries of the problem?
Can you separate the various parts of the problem?
Can you write them down?
What are the relationships of the parts of the problem?
What can't be changed and is constant in the problem?
Have you seen this problem before?
Have you seen this problem in a different form?
Try to think of a familiar problem having the same or similar unknown.
Can you use someone else's solutions?
Can you restate your problem?
Can you make it more general?
Can you make it more specific?
Can the rules be changed?
What are the best, worst and most probable cases you can imagine?

The Plan

Can you solve the whole problem?
What would you like the resolution to be?
Can you picture it?
How much of the unknown can you determine?
Can you derive something useful from the information you have?
Have you used all of the information?
Can you separate the steps of the problem-solving process?
Can you determine the correctness of each step?
What creative techniques can you use to generate ideas?
Can you see the result?
How many different results can you see?
Can you intuit the solution?
Can you check the result?
How many different ways have you tried to solve the problem?
What have others done?
What should be done?
How should it be done?
Where should it be done?
Who should do it?
What do you need at this time?
Who will be responsible for what?
Can you use this problem to solve some other problem?
What is the unique set of qualities that make this problem what it is and no other?
What milestones can best mark your progress?
How will you know when you are successful?