

Problem-Solving Board with Heuristics

Understand the Problem

What are the facts?

What am I trying to find?

What additional information do I need?

Is there extra information included?

Can I state the problem in my own words?

Are there any assumptions I could or could not make?

Devise a Plan

Can I draw a picture of the situation?

Are there any patterns?

Would it help to organize the data in a list or table?

Have I worked a problem like this before? If so, what strategy did I use?

Are there some strategies I could eliminate based on what I know?

Would a systematic guess-and-check help me eliminate some possibilities?

What prior knowledge could I use to solve this problem?

Carry Out the Plan

Is the plan working?

Do I need to try a different approach?

Am I getting close to the answer?

Would it help to break the problem down into several smaller problems?

Have I used all the facts?

Review the Results

Did I answer the question asked?

Is my answer reasonable?

Can I solve this problem using a different strategy? Would I work a problem like this differently next time?

Can I extend the problem to make it more interesting or challenging?

Have I identified all the possible answers? Could there be more than one answer?