

Solving Problems



In Company,
Intermediate



Problem Solving

There is a Japanese expression:

None of us is as smart as all of us.

Following this idea, one American company regularly posts questions on a bulletin board and invites its staff to brainstorm suggestions.

Problem

For example:

In what ways, big or small, could this company save money?

Write your suggestions below. \$100 bonus for all suggestions we adopt.

Solving

The first suggestion the company got was a joke really, but it won the \$100 bonus.

The suggestion was that the bonus be reduced to \$50.

Problem

The owner of a Mexican restaurant in San Francisco faced a dilemma. She wanted to advertise but could not afford to pay for space in the local newspaper or for airtime on the local radio station

Solving

After many expensive and unsuccessful attempts to promote the restaurant with posters and T-shirts, the owner, Martha Sanchez, finally came up with a winner. She offered free lunches for life to anyone who agreed to have the name and logo of the restaurant tattooed on a visible part of their bodies. To date, 50 people have become walking advertisements.



Framework for Problem Solving

The following four phases can be identified in the process of solving problems:

- Understanding the problem
- Making a plan of solution
- Carrying out the plan
- Looking back i.e. verifying

Understanding the Problem

If you do not understand the problem, you can never solve it

If you really understand the problem, you can see a solution

Be careful about hidden assumptions, data and conditions.

Consult definitions for unfamiliar (often even familiar) terminologies.

Construct one or two simple example to illustrate what the problem says.

Devising a Solution Plan

Where to start ?

What can I do ?

Find facts that are related to the problem at hand. Relevant facts usually involve words that are the same as or similar to those in the given problem. It is also a good idea to try to recall previously solved similar problems.

What should I look for ?

Keep in mind that your first try may not work. But don't get discouraged. If one approach doesn't work, try another.



Good Luck!

