## HOW TO SOLVE LOGIC PROBLEMS

Solving Logic Problems is entertaining and challenging. All the information you need to solve a Logic Problem is given in the introduction and clues, and in illustrations, when provided. If you've never solved a Logic Problem before, our sample should help you get started. Fill in the Sample Solving Chart as you follow our explanation. We use a "•" to signify "Yes" and an "X" to signify "No."

SAMPLE SOLVING CHART:

|  | $\stackrel{\rightharpoonup}{\underset{a}{2}}$ | O |  | $\underset{\infty}{2}$ | $\stackrel{\substack { z \\ \begin{subarray}{c}{\mathrm{~m}{ z \\ \begin{subarray} { c } { \mathrm { m } } } \\ {\underset{>}{2}} \\ {\hline}\end{subarray}}{ }$ |  |  |  | $\begin{aligned} & \frac{\rightharpoonup}{c} \\ & \underset{\sim}{2} \\ & \underset{\sim}{2} \\ & \vdots \end{aligned}$ |  |  | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANNE |  |  |  |  |  |  |  |  |  |  |  |  |
| CATHY |  |  |  |  |  |  |  |  |  |  |  |  |
| EVE |  |  |  |  |  |  |  |  |  |  |  |  |
| FRAN |  |  |  |  |  |  |  |  |  |  |  |  |
| IDA |  |  |  |  |  |  |  |  |  |  |  |  |
| MONDAY |  |  |  |  |  |  |  |  |  |  |  |  |
| TUESDAY |  |  |  |  |  |  |  |  |  |  |  |  |
| WEDNESDAY |  |  |  |  |  |  |  |  |  |  |  |  |
| THURSDAY |  |  |  |  |  |  |  |  |  |  |  |  |
| FRIDAY |  |  |  |  |  |  |  |  |  |  |  |  |





## SAMPLE LOGIC PROBLEM

Five couples were married last week, each on a different weekday. From the information provided, determine the woman (one is Cathy) and man (one is Paul) who make up each couple, as well as the day on which each couple was married.

1. Anne was married on Monday, but not to Wally.
2. Stan's wedding was on Wednesday. Rob was married on Friday, but not to Ida.
3. Vern (who married Fran) was married the day after Eve.

## EXPLANATION

Anne was married Mon. (1), so put a " $\bullet$ " at the intersection of Anne and Mon. Put "X"s in all the other days in Anne's row and all the other names in the Mon. column. (Whenever you establish a relationship, as we did here, be sure to place "X"s at the intersections of all relationships that become impossible as a result.) Anne wasn't married to Wally (1), so put an " X " at the intersection of Anne and Wally. Stan's wedding was Wed. (2), so put a " $\bullet$ " at the intersection of Stan and Wed. (don't forget the "X"s). Stan didn't marry Anne, who was married Mon., so put an "X" at the intersection of Anne and Stan. Rob was married Fri., but not to Ida (2), so put a " $\bullet$ " at the intersection of Rob and Fri., and "X"s at the intersections of Rob and Ida and Ida and Fri. Rob also didn't marry Anne, who was married Mon., so put an "X" at the intersection of Anne and Rob. Now your chart should look like chart 1.

Vern married Fran (3), so put a " $\bullet$ " at the intersection of Vern and Fran. This leaves Anne's only possible husband as Paul, so put a "•" at the intersection of Anne and Paul and Paul and Mon. Vern and Fran's wedding was the day after Eve's (3), which wasn't Mon. [Anne], so Vern's wasn't Tue. It must have been Thu. [see chart], so Eve's was Wed. (3). Put "•"s at the intersections of Vern and Thu., Fran and Thu., and Eve and Wed. Now your chart should look like chart 2.

The chart shows that Cathy was married Fri., Ida was married Tue., and Wally was married Tue. Ida married Wally, and Cathy's wedding was Fri., so she married Rob. After this information is filled in, Eve could only have married Stan. You've completed the puzzle, and your chart should now look like chart 3.

In summary: Anne and Paul, Mon.; Cathy and Rob, Fri.; Eve and Stan, Wed.; Fran and Vern, Thu.; Ida and Wally, Tue. In some problems, it may be necessary to make a logical guess based on facts you've established. When you do, always look for clues or other facts that disprove it. If you find that your guess is incorrect, eliminate it as a possibility.

