

EXAMPLES AND STEP-BY-STEP PROCEDURES

Each *Mind Benders*® problem gives you a chart and a set of clues. Read the clues very carefully and mark each true or false (yes or no) answer in the chart. Many students make the mistake of just marking “true” answers in the chart. This makes the problems harder to solve since “false” answers sometimes lead you to the “true” answer. Finding answers is easier if a chart is made showing all the lists at once and is then filled in. Note that the number of small boxes (within one large box) is the square of the number of things in any one set. (Example 1 has three things in each set, so each large box has 9 small boxes).

FOUR- AND FIVE-DIMENSIONAL PROBLEMS

A problem of four or more dimensions is solved the same way as the others. Again, the chart must be made so that each set can be compared with all the other sets.

EXAMPLE 1

Problem: Davis, Edwards, and Gurley are the first, second, and third basemen for the Detroit Tigers. Their first names are Harold, José, and Ken. Their ages are 23, 25, and 28. From the clues below, match up everything.

1. The second baseman has a higher batting average than Ken or Davis.
2. The first baseman is younger than Edwards and older than Ken.
3. José and Davis ate pizza with some of the rest of the team after yesterday’s game.

Solution:

Clue 1

	D	E	G	1 st	2 nd	3 rd	23	25	28
H									
J									
K	1				1				
1 st									
2 nd	1								
3 rd									
23									
25									
28									

Clue 2, step 1

(K < 1st < E)

	D	E	G	1 st	2 nd	3 rd	23	25	28
H			G			3 rd	23		
J			G			3 rd	23		
K	1	2	X	2	1	X	X	2	2
1 st		2							
2 nd	1								
3 rd									
23		2		2					
25		2		X	25	25			
28	28	X	28	2					