

If Dumani and Fred are both richer than Tom, and Hal is poorer than Dumani but richer than Fred, which man is the poorest and which one is the next poorest?

Write the names of all 4 men in order.

Step 1: If Dumani and Fred are both richer than Tom...

The problem does not indicate whether Dumani and Fred are actually equal to each other. So they can be represented at the same level for now, both above Tom.

Step 2: ... while Hal is poorer than Dumani but richer than Fred...

This means that Dumani and Fred are not equal; Hal is between them with Dumani richest.

Tom is poorest and Fred is next poorest.

Paul and Tom are the same age. Paul is older than Cynthia. Cynthia is younger than Hal.

Is Paul older or younger than Hal?

Some problems are best supported by a 2D table.

Some problems benefit from another approach to organizing the information, such as a graph.

Three fathers – Pete, John, and Nick – have between them a total of 15 children of which 9 are boys. John has 1 more child than Pete, who has 4 children. Nick has 4 more boys than girls and the same number of girls as Pete has boys.

How many boys each do Nick and Pete have?

# Problem 3 Solution

	Boys	Girls	Total
Pete			
John			
Nick			
Total			

On a certain day I ate lunch at Tommy's, took out 2 books from the library (*The Sea Wolf* and *Martin Eden*, both by Jack London), visited the museum and had a cavity filled. Tommy's is closed on Wednesday, the library is closed on weekends, the museum is only open Monday, Wednesday, and Friday, and my dentist has office hours Tuesday, Friday, and Saturday.

On which day of the week did I do all these things?

Boris, Irwin and Steven are engaged in the occupations of librarian, teacher, and electrician, although not necessarily in that order. The librarian is Steven's cousin. Irwin lives next door to the electrician. Boris, who knows more facts than the teacher, must drive 45 minutes to visit Irwin's house.

What is each man's occupation?



Sally loaned \$7 to Betty. But Sally borrowed \$15 from Estella and \$32 from Joan. Moreover, Joan owes \$3 to Estella and \$7 to Betty. One day the women got together at Betty's house to straighten out their accounts. Which woman left with \$18 more than she came with?

## Problem 7

VR Problems 10

Lester has 12 times as many marbles as Kathy. John has half as many as Judy. Judy has half as many as Lester. Kathy has 6 marbles.

How many marbles each do Lester and John have?

You do not need to use algebra to solve this problem.