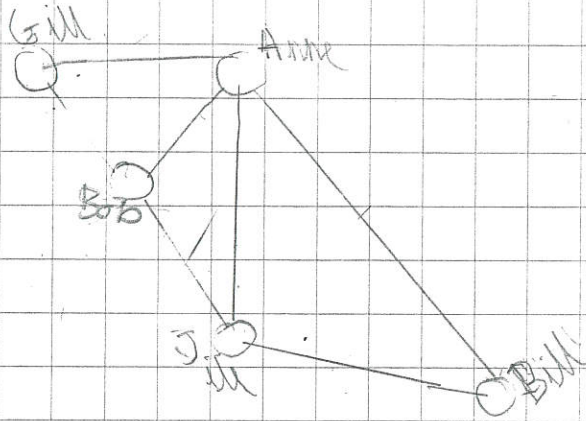


Right

1. Each problem had a unique solution. The question which we didn't need was Emily had two friends.

2. The number is double the people in the 1st one because there are 2 people with 3 friends, 2 people with 2 friends and 2 people with one friend.

3



- Bill is not a friend of Gill.
- Anne has the most friends.
- Anne is a friend of Bill and Gill.
- Bill has 2 friends
- Anne is a friend of Jill
- Bob has 3 friends
- Bob hates Bill

Carry on question 2

If you add all how many friends each person has and work out how many edges there are the ration will be 2:1 so that means the average of how many friends each person has is 2.

For the second problem I started with clue 4, (Anna has more friends than anyone else) because it is the most obvious and it helps work out everyone else's friends.

After that I worked out Clue 3 because it is the second most obvious (Bella is Fiona's only friend.)

As you see you work out the most obvious, second obvious and so on. It will become easier as you go on because you work more out and the ones you think are hard will become easier.

Following on from clue 3, you do clue 1 which means 'you will stick both of them (Ciara and Bella) together and always move them together.'

Ciara does not like Emily so that means Ciara can't go with Emily which restricts Ciara's places to the top right.

Next you go onto clue 5 because Daphne can only go to the middle right.

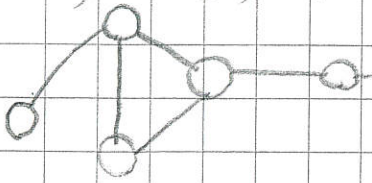
As Ciara and Bella are friends there is only one place Bella can be is Next to Fiona.

Gill and Daphne are not friends so there is only 1 place Gill can be which is middle left.

There is only 1 place Emily can go so she goes to the bottom right.

This is a Logic Questions so do not use trial and error or you will take a long time.

~~Billy~~ Jamie, Billy, Danny, Ryo and Elliot are a group of boys.



Billy and Danny have 3 friends.

Jamie has 1 friend who is Danny.

Elliot is friends with Billy.

Ryo is friends with Billy and Danny.

In the second problem ~~you~~ I started by using clue number ~~5~~ because it is quite obvious that she is in circle number 5 because it has the most edges to other nodes.

After that I used clue number 3 as Fiona only has 1 friend and only circle number 1 has the edge to 1 circle. Retrospectively Bella sits in on circle 2 which is to the right of Fiona (circle 1)

Following on from clue 3, clue 1 says Bella who is on circle 2 is friends with Ciera. ~~which~~ <sup>friend</sup> means she must be on circle 3 or 4.

From knowing that Ciera must be on circle 3 or 4 you know that Gill must be on circle 4 or 6 the same is for Daphne because in clue 6 it explains they are not friends. Using this information I know that Ciera is in circle 3.

Next I looked at clue 5 which told me that Daphne had 3 friends which put her into circle 6. Thusforth Gill is put into circle 4. After that I had to put Emily into circle 7 as it was the only circle left. I used clue 7 as a check for if I had done it right I had.

Remember this is a logic problem not trial and error.

Luise H