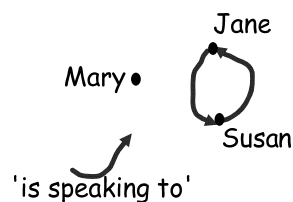


### An Argument for Discussion

A group of nine girls, whose names appear here, had a big argument which left some girls not talking to others!  
In the table, a Y means 'is speaking to' and a X means 'is not talking to'

	Mary	Jane	Susan	Ann	Pat	Jill	Diane	Sally	Kate
Mary		X	X	Y	X	X	Y	X	X
Jane	X		Y	Y	Y	Y	Y	Y	Y
Susan	X	Y		X	X	X	Y	Y	X
Ann	Y	Y	X		Y	X	Y	X	Y
Pat	X	Y	X	Y		X	Y	X	Y
Jill	X	Y	X	X	X		X	X	Y
Diane	Y	Y	Y	Y	Y	X		X	X
Sally	X	Y	Y	X	X	X	X		X
Kate	X	Y	X	Y	Y	Y	X	X	

Would this information be better given in the form of an arrow graph? Try it to see which you prefer.



Mary started a rumour about a tenth girl and this rumour came back to Mary after being heard by each girl once and once only! Each girl heard it from - and passed it on to - a girl with whom she is on speaking terms. In what order did the rumour pass?  
(HINT: Pat was one of the last to hear it)

### Learning and Teaching Objectives

- Identify the given facts and prioritise them
- Look for any relationships and patterns in the information given
- Choose and use a recording system to organise the given information
- Check the answer meets all the criteria

## An Argument for Discussion Solution

Mary → Diane → Susan → Sally → Jane → Jill → Kate → Pat → Ann → Mary