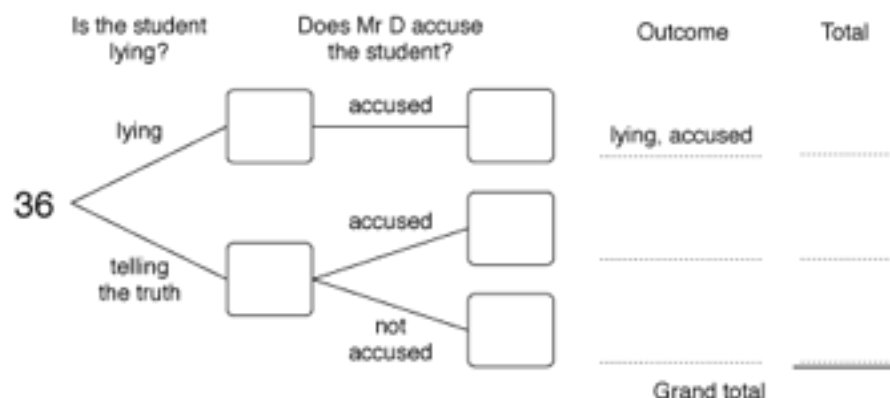A certain teacher, Mr L I Detector, claims he can tell when students are lying about their homework. This is true. Unfortunately, he also accuses some students who are telling the truth.

So what are the chances that someone will be wrongly accused?

Complete the tree diagram and 2-way table below to show **the results for 36 students**.
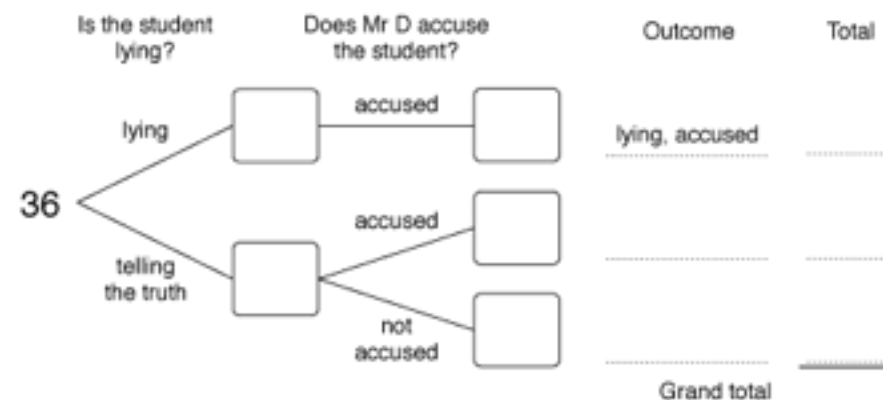
Tree Diagram

2-way table		Does Mr D accuse the student?		Total
		Accused	Not accused	
Is the student lying?	Lying			
	Telling the truth			
Total				

How do the observed results compare with what we might expect?

Complete the tree diagram and table below to show what we would **predict for 36 students**:

Tree Diagram

2-way table		Does Mr D accuse the student?		Total
		Accused	Not accused	
Is the student lying?	Lying			
	Telling the truth			
Total				

How do your predicted results compare with what happened in your experiments?