A school principal is looking at the combinations of subjects students are studying.

He learns that the probability that a student is studying Chemistry is 0.5 and that the probability that a student is studying Physics is 0.1. He has also found that the probability that a student is studying Chemistry **given** that they are studying Physics is 0.7.

- (a) What is the probability that a student is studying both Chemistry and Physics?
- (b) What is the probability that a student is studying Physics given that they are studying Chemistry?
- (c) What is the probability that a student is studying Chemistry or Physics or both?