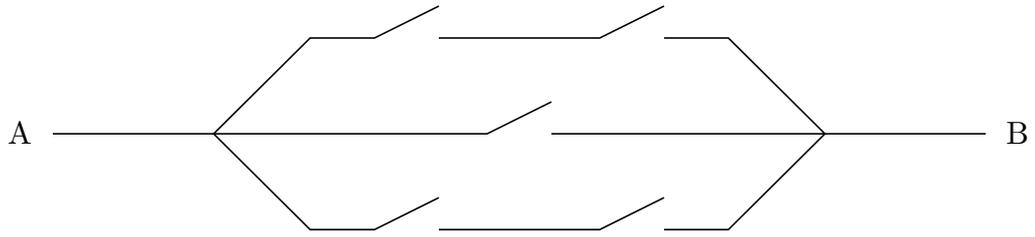# 1999 Paper 2 Question 4

Probability

Each of the five switches in the above circuit is closed with probability p, independently of all the other switches. What is the probability of there being a connection from A to B? Express the answer as a polynomial in p.   [7 marks]

The circuit is then modified to the version shown below, the five switches still being independent. What is the probability of there being a connection from A to B now? Again express the answer as a polynomial in p.   [13 marks]