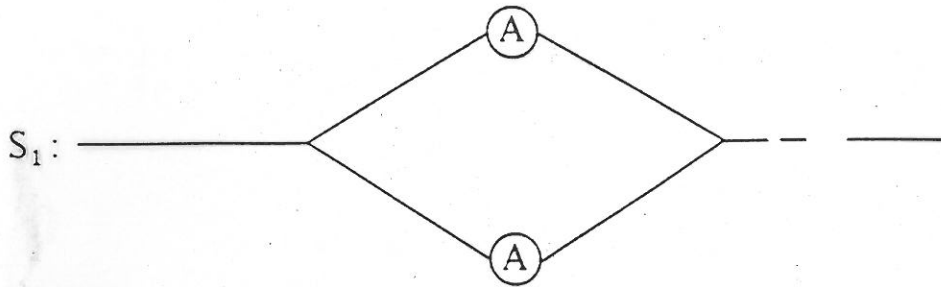


Exercises

1. Two parts of a machine are manufactured independently. These two parts have probabilities p_1 and p_2 respectively of failing. Find the probability that

- (a) neither part fails
- (b) at least one part fails
- (c) exactly one part fails.

2. A component A which has 90 per cent reliability (it will fail one in ten times) is vital to the running of a machine. An identical component is fitted in parallel to form system S_1 , and the machine will work provided that one of these components functions correctly.



Find the reliability of system S_1 .