1. Failure rate for item A is 0.002 failures/hr., item B is 0.0003 failures/hr. and item C is 0.001 failures/hr. The components are serially related with independent failure modes. What is the system reliability at 55 hrs? Please round your answer to 3 decimals.
2. A system has 2 components (component A and B) in parallel. What is the system reliability for 1000 hrs? Assume constant failure rate for all components with the following data. Component A has a failure rate of 0.000034 failures/hr and component B has a failure rate of 0.000044 failures/hr. Please round your answer to 3 decimals.
3. A vehicles’ drivetrain consists of a driveshaft, CV joints, and a differential, with 50000 hrs reliability of 0.99, 0.999 and 0.95 respectively. The components are serially related with independent failure modes. What is the reliability of the drivetrain at 50000 hrs? Please round your answer to 2 decimals.
4. Which one of the following statements is NOT true?
5. Root causes are those over which management has no control.
6. Root causes are those that can reasonably be identified.
7. Root causes are those for which effective recommendations can be generated.
8. Causal factor charting provides a structure for investigators to organize and analyze the information gathered during the investigation and identify gaps and deficiencies in knowledge as the investigation progresses.
9. True or False? Simply stated, RCA is a tool designed to help identify not only *what* and *how* an event occurred, but also *why* it happened.
10. True
11. False