Homework 8

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"I pledge my honor that I have abided by the Stevens Honor System." - JM, EO, DB, MM

Summary:

For this assignment, we calculated the mean time to failure for a system, given the MTTF of its hardware and software components. This was complete using functions provided in the lecture slides that examined systems that operated in series. The team assumes that the system cannot function unless both the hardware and software are functioning properly.

You determine that the MTTF for your hardware is 6 months, and for the software, it is 2 months. What is the MTTF for the entire system (assume it only has hardware and software as above)?

MTTF(sys) = 1 / λ(sys)
λ(sys) = λ(h) + λ(s) = ⅙ + ½ = 0.66666
MTTFsys= 1 / λ(sys) = 1 / 0.66666 = 1.5 months