Problem 1

System works if at least 11 components work.

$\quad$ *Simulation*:

$$\sum_{15}^{i=1} I(U_i \leq p_i) \geq 11$$

$\quad$ a) simulation results: P(A) = 0.987

$\quad$ b) simulation results: P(A) = 0.841 with standard error = 0.00366

Problem 2

Problem 4

a) T_1

References

[1] Monty Hall problem, [cited 27.September 2016]. Available at `https://en.wikipedia.org/wiki/Monty_Hall_problem`