Dependability is the need.

Knight Capital trading

Reliability

\[ R(t) = P(\text{No error occurring in time } (0,t)) \]

\[ 0 \leq R(t) \leq 1 \]

\[ A(t) = \frac{\text{Total time within } (0,t) \text{ that system is operational}}{t} \]

\[ 0 \leq A(t) \leq 1 \]
Safety \( S(t) \)  
\[ S(t) = \Pr(\text{no safety critical failure in } [0, t]) \]

\[ S(t) \geq R(t) \]