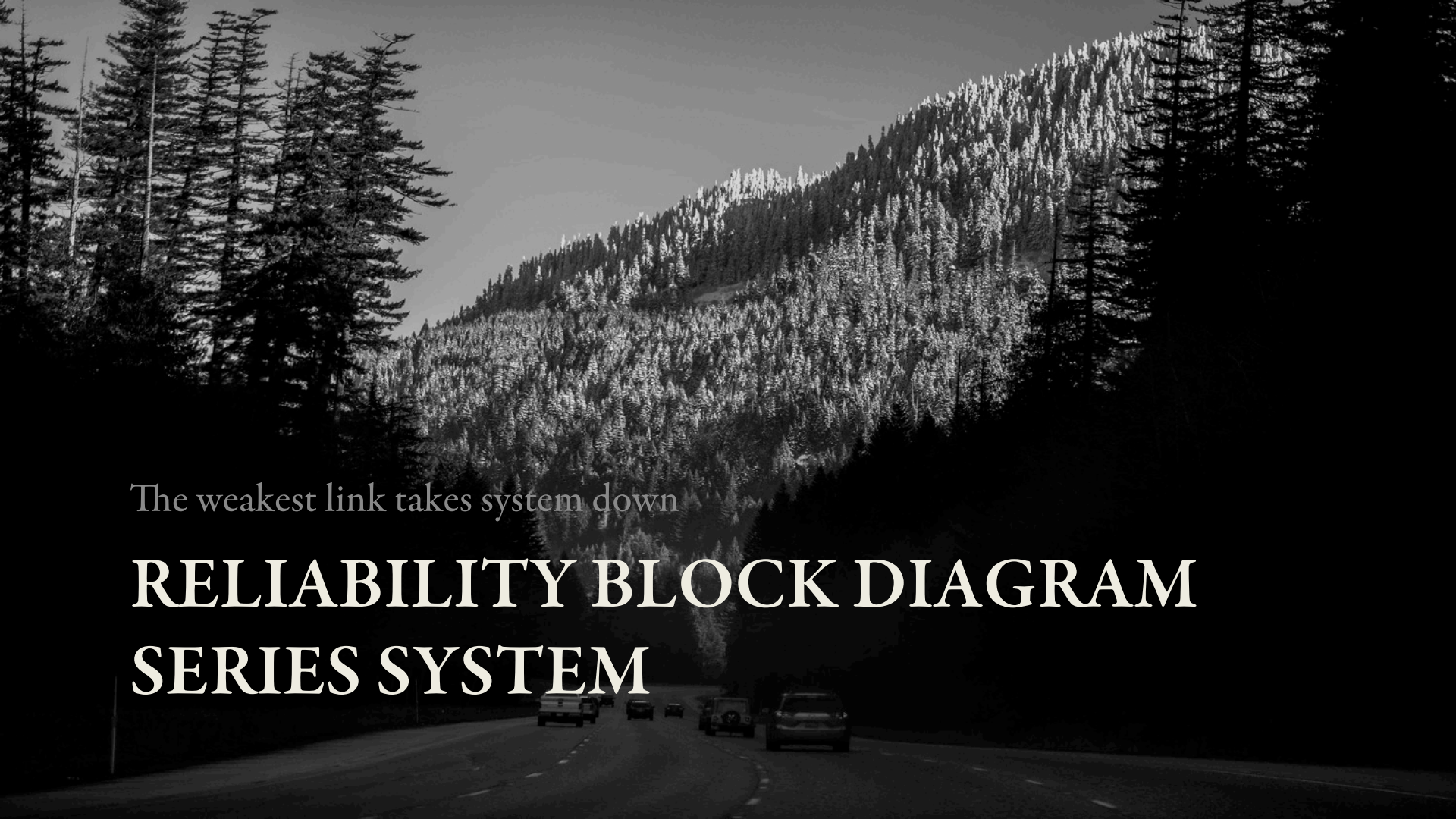




ASQ CRE Prep course

Lesson IV. A. 2. a.

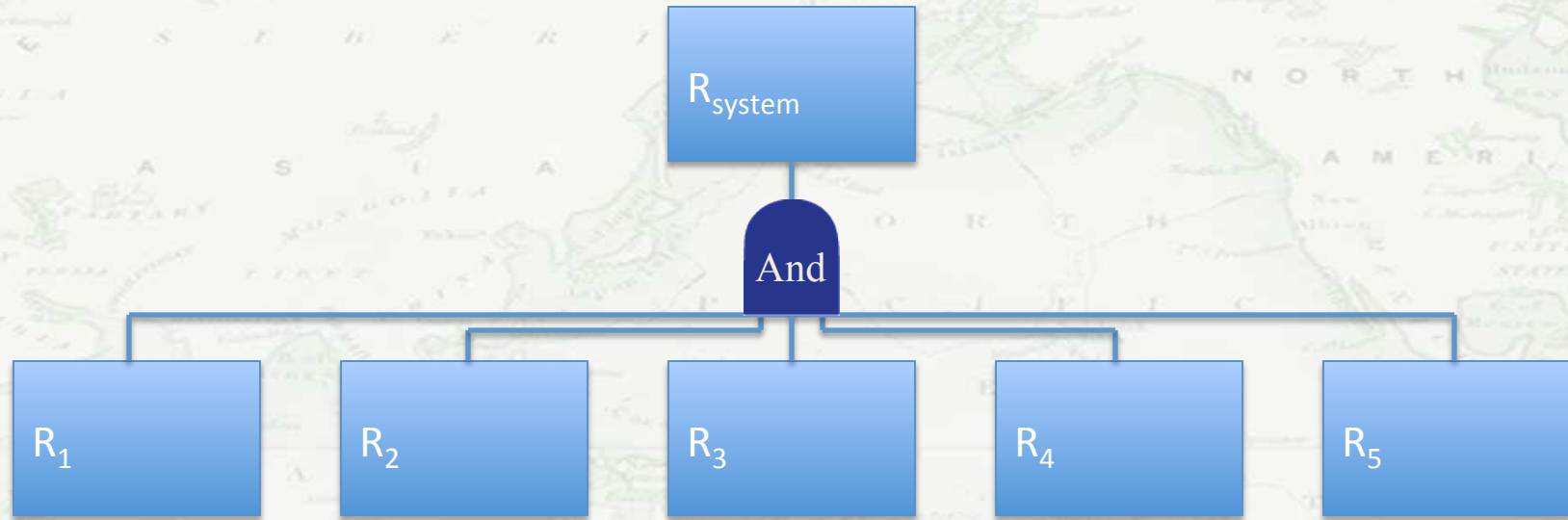
Reliability Block Diagrams
and Models – Series Systems



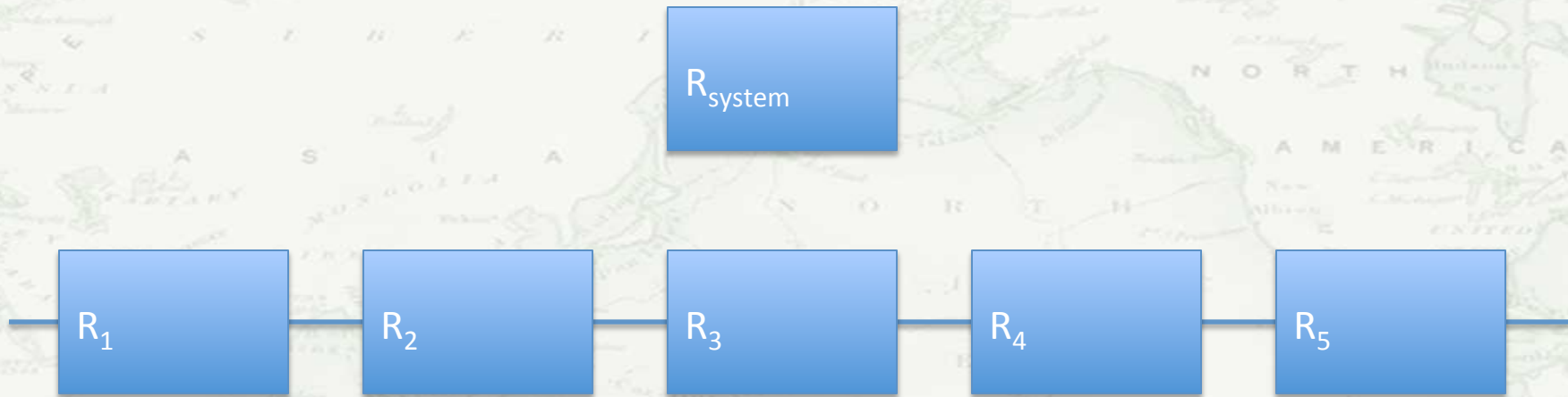
The weakest link takes system down

RELIABILITY BLOCK DIAGRAM SERIES SYSTEM

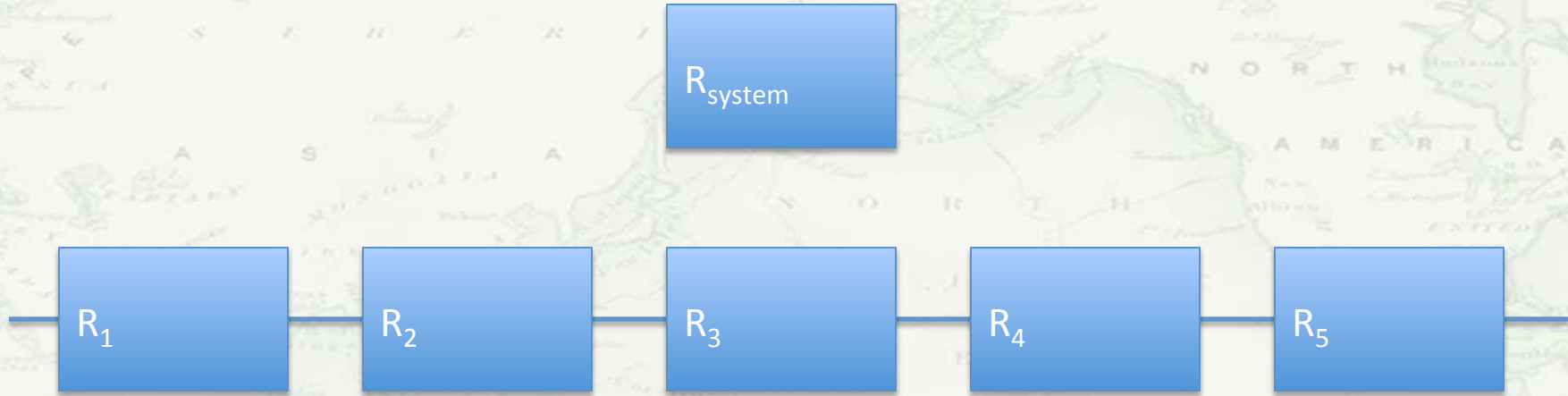
Series System (Success Tree)



Series System



Series System

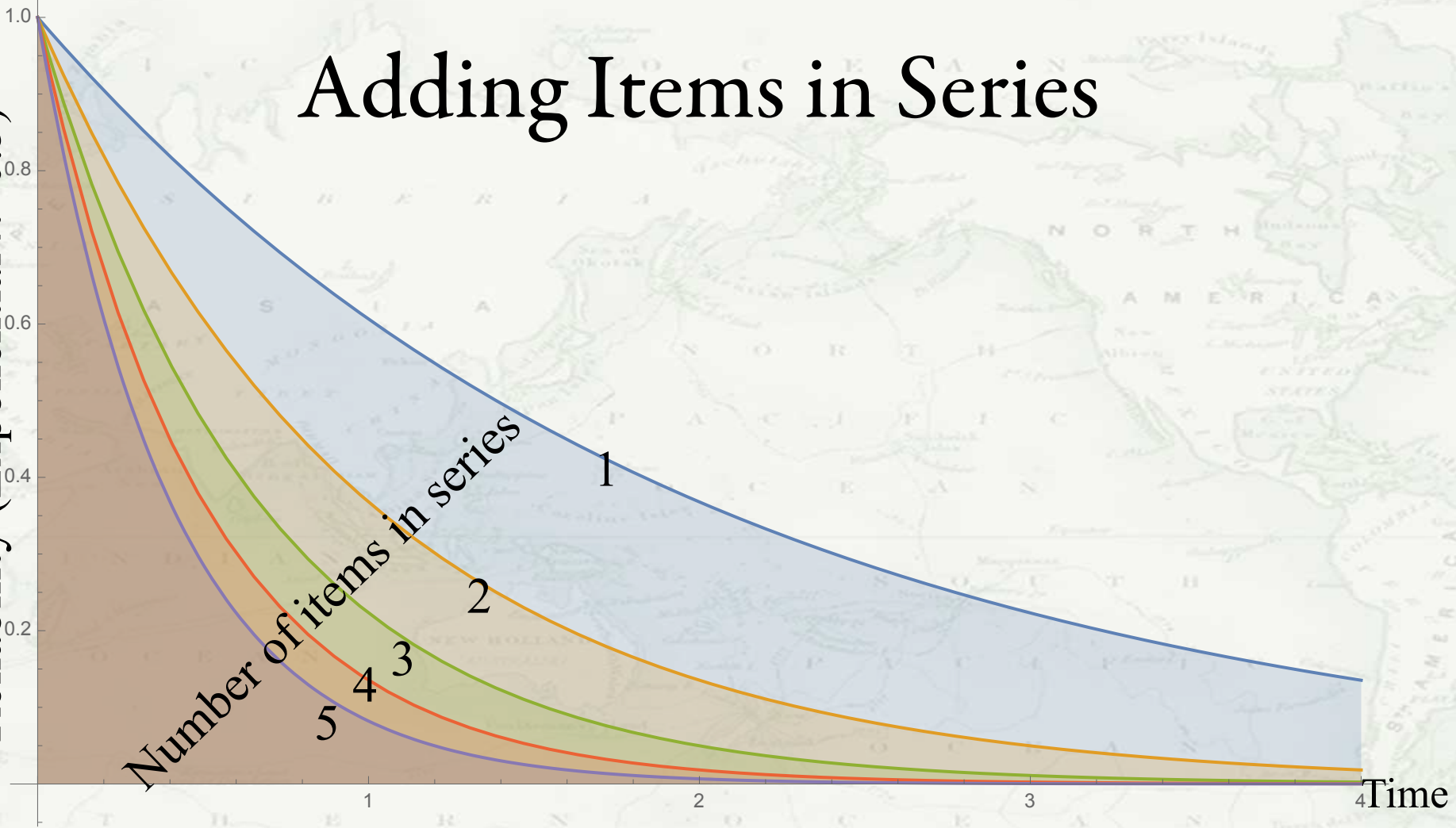


$$R_{\text{system}} = \prod R_i$$

Adding Items in Series

Reliability (Exponential $\lambda=0.5$)

Number of items in series



Time

How would you
connect this to
decisions?



ASQ CRE Prep course

Lesson IV. A. 2. b.

Reliability Block Diagrams
and Models – Parallel Systems