

A “Primer on Model-based System Engineering” (Long & Scott)

Link to book http://catsr.ite.gmu.edu/SYST490/mbseprimer2ndedition_full.pdf

Please provide short, concise answers

WHAT IS A SYSTEM? (page 1)

- 1) What is the definition of a system according to DoDAF:?
- 2) What is the definition “a system” provided by Donella Meadows?
- 3) What is Donella Meadows famous for (Hint: She wrote a famous book)?
- 4) What is the INCOSE Definition of “a system”?
- 5) Identify 3 commonalities between the DoDAF, Meadows and INCOSE definitions?
- 6) According to Ackoff, what is the definition of “systems thinking”?
- 7) According to Ackoff, why is it difficult to perform “systems thinking”?
- 8) According to Long & Scott, a system must take into account the “system properties within the boundaries of the system.” Name and provide a short definition of each property.
- 9) According to Long & Scott, using a systems language, a system can be represented hierarchically in sub-units. Name and describe 4 standard sub-units.