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Ahmed Khalil

Ahmed777Khalil@students.mans.edu.eg

CH1: Introduction

Modeling & Simulation

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| A -------- is the manipulation of a model in such a way that it operates on time or space to -------- it | | | |
| Modeling, Compress | Simulation, compress | Modeling, decompress | Simulation, decompress |
| A computer is used to build a --------- model which contains the key parameters of the physical model | | | |
| physical | mathematical | schematic | narrative |
| Which type of applications in engineering support the use of M&S. | | | |
| Electrical | Mechanical | Architectural | All of Domains |
| To ensure that the simulation is applicable, the user must understand the assumptions, ----------, constraints of its implementation. | | | |
| contextualization | conclusion | conceptualization | comparisons |
| The Engineering Prototypes considered as a ------------ model representation. | | | |
| physical | mathematical | schematic | narrative |
| Maps and Graphs considered as a --------------- model representation. | | | |
| physical | mathematical | schematic | narrative |
| When the real-world items are described as words & sentences making that a ----------- model | | | |
| physical | mathematical | schematic | narrative |
| aX + b = c is a -------- model of a -------- line equation. | | | |
| Mathematical, constant | Mathematical, Generic | Physical, constant | physical, Generic |
| From the benefits of M&S is the time-saving & reducing cost which operation can achieve the drawbacks of M&S? | | | |
| Actual experimentation | Virtual reality | Augmented Reality | Virtual experimentation |
| What type of knowledge can solve real-world problems and achievable by computers? | | | |
| physical | narrative | mathematical | All of the above |
| What is the environment that can be totally simulated in software? | | | |
| Building-in-the-city | Spooler-in-the-car | Patient-in-a-clinic | Human-in-the-loop |
| models may be updated and improved using results of -------------------. | | | |
| simulation | Actual experiments | Computational power | Data |
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