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MTH 323
Reading Assignment 0
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1) What is a model?

A model is a simplified representation of a system or phenomena which occurs in the real world.

2) What is a dynamic model?

A dynamic model is a model which incorporates the ability for its constituent parts to change their state over time.

3) When is a dynamic model preferred over the alternative?

Dynamic models are preferred over other methods of problems solving for a number of reasons. They are preferred over experimentation in some cases because limitations of experimental methods often make it unreasonably complex to test a hypothesis. Dynamic models are also preferred over data extrapolation because often previous data cannot make reliable predictions about future data. Furthermore, dynamic models are preferred over steady-state models because they allow for the system to change over time, which can more accurately describe physical systems.