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Raegan Higgins* (raegan.higgins@ttu.edu) and **Kristen Weasenforth**. *An SIR Model on Time Scales*. Preliminary report.

The goal is to create a time-scale version of the classic SIR epidemic model. One issue with transforming the SIR model into another is that it cannot be solved in closed form. We will use the idea of expressing $S(t)$ as an exponential function on a general time scale \mathbb{T} and solve for $I(t)$ and $R(t)$ to obtain the SIR system on \mathbb{T} . (Received September 25, 2017)