Logistic Equation

GROUP MEMBERS 1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________

Goal: To examine graphically the behavior of solutions of the logistic equation

\[ \frac{dy}{dt} = \frac{2y(1 - \frac{y}{5})}{.} \]

Open the program HPGSolver from DETools. Enter this equation into the program. Adjust the settings so that
\[ y \in [-3, 12] \text{ and } t \in [-4, 20]. \]

1. Play around with the program and figure out how it works.

2. Describe the behavior of solutions of this differential equation.

3. What questions do you have:
   a. about what the program is doing
   b. about the mathematics