

Answer Template for Lab 2: Logistic Equation
ENGR 232 – Dynamic Engineering Systems

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First

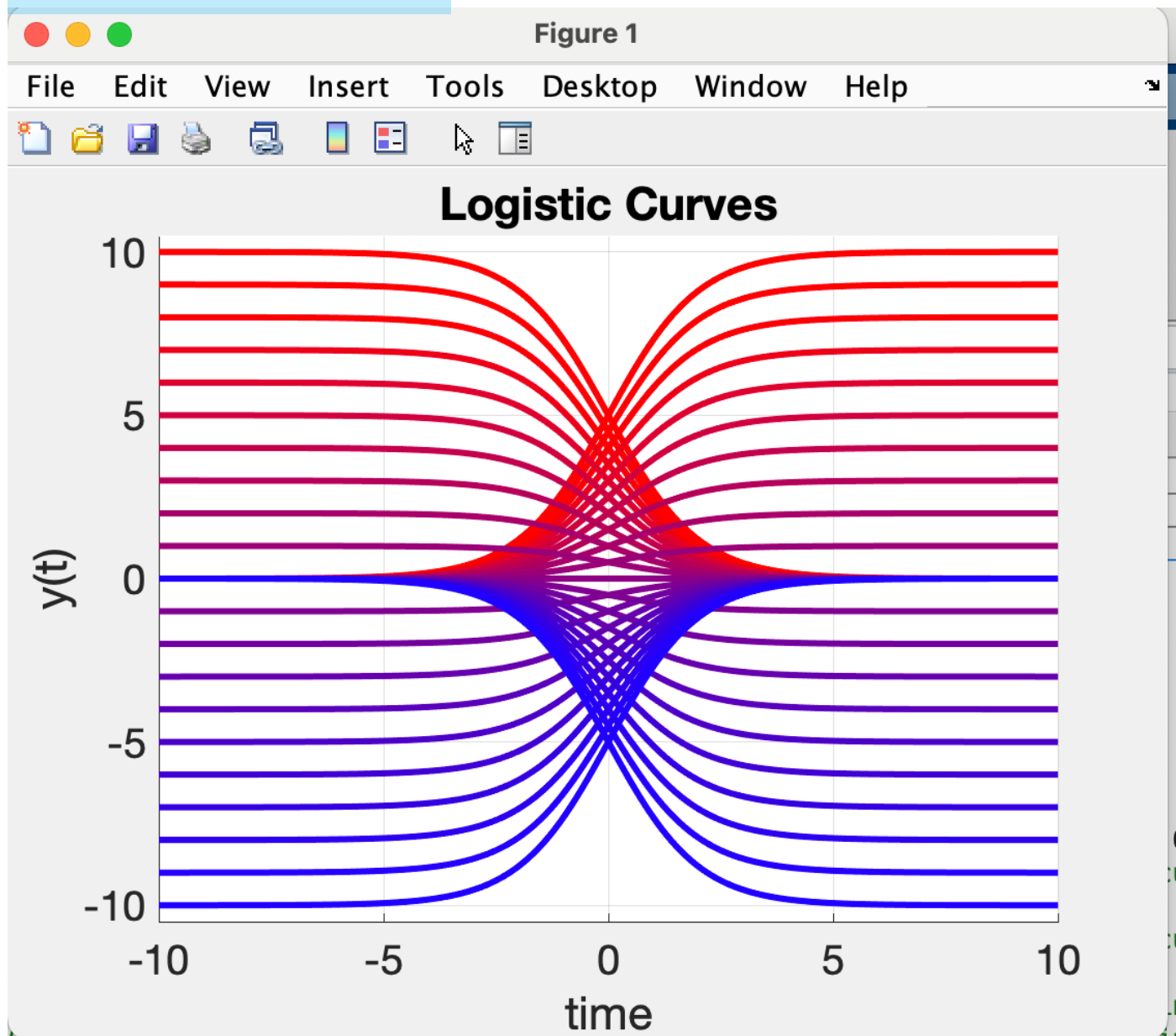
Last

Section: 61

Summer 2022

Questions 1-2: Paste your graph with 21 sigmoidal curves and their 21 mirror images (with $k = -1$) here. Your logistic curves should gradually transition from red to blue through shades of purple.

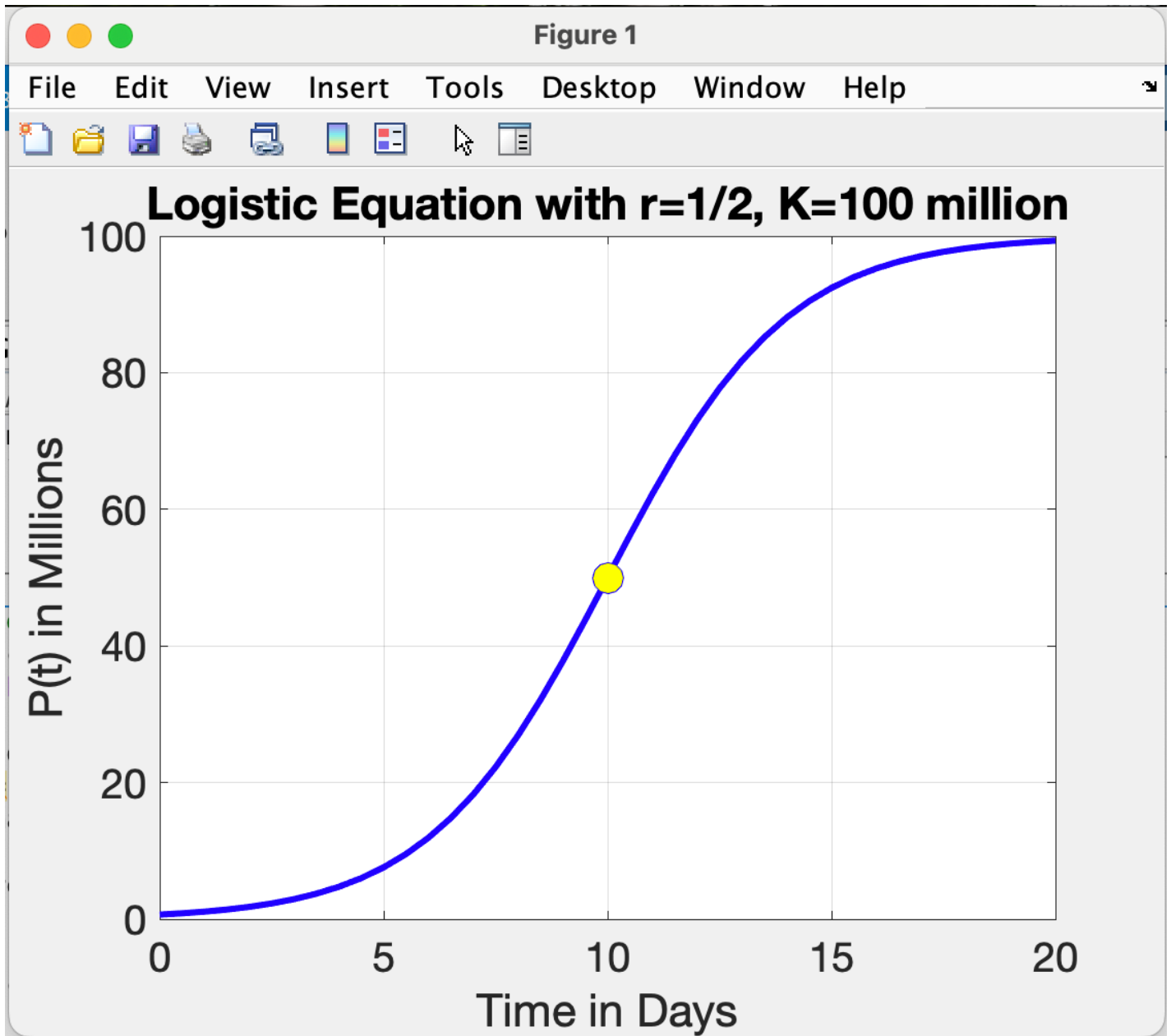
Grader: Solution must have no background



Question 3: The exact solution satisfying $P(10) = 50$ is $p(t) = \frac{100}{1+e^{5-t/2}}$

or

Q4: Replace the sample, with your own graph. Your answer must not include the colorful background pattern.

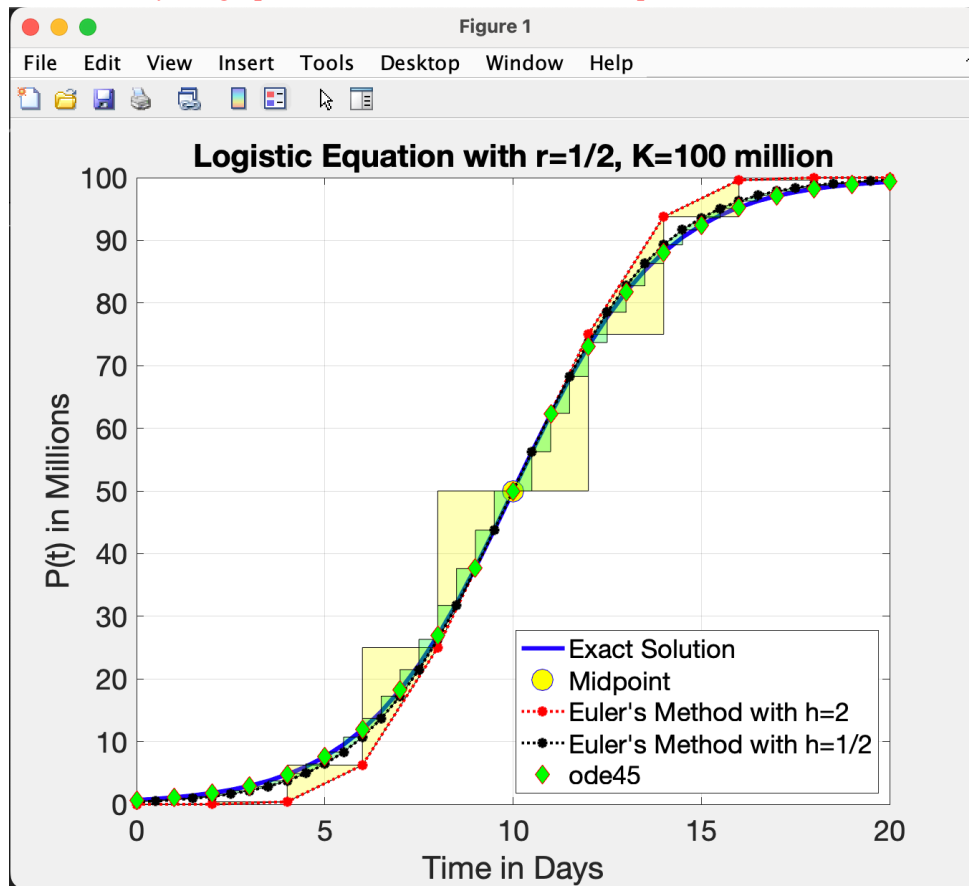


Q5. The slope is: $f(10,50) = 12.5$

Questions 6-10: Replace the sample below, with your own graph.

(5 points)

The LHS of your graph must not include the colorful pattern.



Grader will award one point for each feature in this list. 5 points.

1. Both Euler approximate solutions are shown correctly.
2. There are small yellow and green triangles.
3. The ode45 solution is shown with green diamonds with red outlines
4. Graph includes the points backwards in time on the LHS.
5. The legend does not obscure the data points.

Ready to Submit?

Be sure all ten questions are answered. When your lab is complete, be sure to submit three files:

1. Your completed Answer Template as a PDF file
2. A copy of your MATLAB Live Script
3. A PDF copy of your MATLAB Live Script (Save-Export to PDF...)

The due date is the day after your lab section by 11:59pm to receive full credit. You have one more day, to submit the lab (but with a small penalty), and then the window closes for good and your grade will be zero.