MA 232   Practice Exam 3 Answers   Spring 2013

1. $\begin{bmatrix} 42 \\ 5 \end{bmatrix}$

2. Leslie diagram is omitted here; 30

3. $-\frac{9\sqrt{3}}{2} + \frac{19}{2}$

4. $(1, \frac{9}{2})$

5. A

6. $\ln(e^y + 2) = \frac{1}{2}x^2 + C$

7. $y = x^3 + \frac{1}{4x^2}$

8. $y = 0$ is semistable; $y = 2$ is stable; $y = 5$ is unstable

9. 3.464

10. 3025

11. 1 linear, 2 separable, and 1 autonomous

12. $5N_0 + (Q_0 - 5N_0)e^{-0.2}$ (in micrograms of PCB per gram of tissue)