Name: Date: 02/22/2018

M20580 L.A. and D.E. Tutorial
Quiz 4

1. Let A, B, C be 3×3 matrices with $\det(A) = -2$, $\det(B) = \frac{1}{3}$, and $\det(C) = \frac{1}{5}$. What is $\det\left(3A^{-1}B^3C^T\right)$?

2. Consider the linear system of equations:

$$\begin{aligned} x_1 + 2x_2 + x_3 &= 2 \\ -x_2 + 2x_3 &= 1 \\ 3x_1 + x_3 &= 0 \end{aligned}$$

Use **Cramer's Rule** to find x_3. **Caution!** You must use Cramer's Rule and show all your work to receive full credit.