Math 1553, Quiz 6 (3.5-3.6 and Ch. 4), Fall 2026, Version B

Name (ALL CAPS)		**GT ID**		**Section**	

Please write your name in ALL CAPS. For questions with bubbles, either fill in the bubble completely or leave it blank. **Do not** mark any bubble with "X" or "/" or any such intermediate marking. Anything other than a blank or filled bubble will be given a score of zero.

1. (1 point) Suppose A is an 3×3 matrix and $A\begin{pmatrix}1\\1\\0\end{pmatrix} = A\begin{pmatrix}0\\1\\1\end{pmatrix}$, then A cannot be invertible.

   ◯ TRUE ◯ FALSE

2. (1 point) Find A^{-1} for $A = \begin{pmatrix}3 & 1\\4 & 2\end{pmatrix}$. *Hint: check your answer.*

   ◯ $A^{-1} = \begin{pmatrix}2 & -1\\-4 & 3\end{pmatrix}$ ◯ $A^{-1} = \frac{1}{2}\begin{pmatrix}3 & -1\\-4 & 2\end{pmatrix}$ ◯ $A^{-1} = \frac{1}{2}\begin{pmatrix}-2 & 1\\4 & -3\end{pmatrix}$

   ◯ $A^{-1} = \frac{1}{2}\begin{pmatrix}2 & -1\\-4 & 3\end{pmatrix}$ ◯ $A^{-1} = \frac{1}{2}\begin{pmatrix}2 & 1\\4 & 3\end{pmatrix}$ ◯ $A^{-1} = \frac{1}{10}\begin{pmatrix}2 & -1\\-4 & 3\end{pmatrix}$

   ◯ none of these

3. (1 point) Find the area of the triangle with vertices

   $$(1,2), \quad (4,3), \quad (2,7).$$

   Clearly fill in the bubble for the correct answer below.
   Hint: the triangle is half of a parallelogram.

   ◯ $\frac{7}{2}$ ◯ 14 ◯ 16 ◯ -14 ◯ 7 ◯ 8 ◯ none of these