Math 346 Quiz 6B

March 7, 2016

Name: ANSWERS – Supplement

Instructions: No calculators! Answer all problems in the space provided! Do your rough work on scrap paper.

1. Fill in the blanks:
   Suppose $\det A = 0$, then
   - The system $A\vec{x} = \vec{b}$ has either none or infinitely many solutions
   - A^{-1} does not (exists/does not exist)
   - The matrix A is singular (non-invertible) (singular/non-singular)
   - The RREF of A is $\neq I_n$
   - The solution to $A\vec{x} = \vec{0}$ is $\vec{x} =$ could be many things... infinite solns. Including $\vec{x} = \vec{0}$