$\underset{June \ 9, \ 2016}{\mathrm{Math}} \ 4400 \ \mathrm{Quiz} \ 3$

Instructions: You have until the end of class to complete this quiz. This quiz is two pages, and worth 20 points. Make sure to write your name at the top of the quiz. Show all of your work for full credit!

1. (10 points) Let $a \in \mathbb{Z}$. Show that $a^2 - 2$ is not divisible by 5.

2. (10 points) Use the Euclidean Algorithm to find all incongruent solutions to $15x \cong 12 \mod 21$.