$\underset{June \ 2, \ 2016}{\text{Math}} \ 4400 \ \text{Quiz} \ 2$

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) Find all integer solutions to 427x + 259y = 7

2. (10 points) Suppose $a, b \in \mathbb{Z}$ and $a \neq 0$. Suppose also that $c \mid a$ and $c \mid b$. Show that $c \mid \gcd(a, b)$