Math 160B Homework 2 January 10, 2020

Name: _____

Pid: _____

1. (10 points) Let S be an infinite enumerable set. Show that there is an infinite decidable set $T \subseteq S$.

2. (10 points) Let $S \subseteq \mathbb{N}$ be decidable and let

$$D = \{p \ : \ p \text{ is prime and } p \text{ divides some } n \in S\}.$$

Is the set D always decidable?