

Name:

**Problem 1:** Use the Euclidean Algorithm to compute  $(343, 280)$ .

*Note that you must use the Euclidean Algorithm to do this computation to receive credit for this problem.*

**Solution:** We have

$$343 = 280 \cdot 1 + 63$$

$$280 = 63 \cdot 4 + 28$$

$$63 = 28 \cdot 2 + 7$$

$$28 = 7 \cdot 4 + 0$$

The last nonzero remainder is 7, so  $(343, 280) = 7$ .