

**Math 453: Homework # 10**

**Due Friday, 5 April 2019 in class**

In writing your proofs, fully explain all the important steps. Use full and grammatically correct English sentences. Be clear and concise.

Exercise numbers are from the end-of-section exercise sets in the **2002** reissue of *Elementary Number Theory* by James K. Strayer.

1. (5 points) Exercise Set 4.2, # **20**
2. (5 points) Exercise Set 4.2, # **23**
3. (5 points) Exercise Set 4.2, # **25** (*Hint*: Item 2 of Homework 5 and Items 1 and 4 of Homework 9 can be useful.)
4. (5 points) Exercise Set 4.2, # **26**
5. (5 points) Exercise Set 4.3, # **30**