HOMEWORK 8

1. Problem 1, Section 6.1 from the textbook.

2. Problem 2, Section 6.1 from the textbook.

3. Problem 8, Section 6.1 from the textbook.

4. Problem 1, Section 6.2 from the textbook.

5. Problem 4, Section 6.2 from the textbook.

6. Problem 5, Section 6.2 from the textbook.

7. Show that if m and n are positive, relatively prime integers, there is a $1-1$ correspondence between the following sets

$$\{d \in \mathbb{Z}_{>0}; d \mid mn\} \overset{1-1}{\longleftrightarrow} \{d_1 d_2; d_1, d_2 \in \mathbb{Z}_{>0}, d_1 \mid m, d_2 \mid n\}$$