Math 71 Homework Due November 7th Second part

1. List all the isomorphism classes of abelian groups of order 600. First, give your list as elementary divisor decompositions and then in terms of invariant factor decompositions.

Also work the following problems.

Page 166, #5. (The *exponent* of a group G is the smallest positive integer e such that $x^e = 1$ for all $x \in G$. The definition of the "type" of an abelian group is given on page 163.)

Page 230, #3, #7 and #11.