- 1. Let  $G = \mathbb{Z}/20\mathbb{Z}$  and  $H = 4\mathbb{Z}/20\mathbb{Z}$ . List the elements of G/H.
- 2. Determine the order of  $(\mathbb{Z} \oplus \mathbb{Z})/<(4,2)>$ . Is the group cyclic?

November 12, 2004