

Math 361

Quiz 6

1. (5 pts.) Let G be a group of order pq , where p and q are prime numbers. Show that every proper subgroup of G is cyclic.

2. (5 pts.) Find the order of $(8, 9, 27, 45)$ in $\mathbb{Z}_9 \times \mathbb{Z}_{18} \times \mathbb{Z}_{45} \times \mathbb{Z}_{54}$.