1. (5 points) Exercise Set 4.3, # 32

2. (5 points) Exercise Set 4.3, # 33

3. (5 points) Exercise Set 4.3, # 35 (b)

4. (5 points) Exercise Set 5.1, # 5 (a)  
   (Hint: Let \( k = \text{ord}_m a \), \( \ell = \text{ord}_m b \), and \( n = \text{ord}_m (ab) \). Then \( 1 \equiv (ab)^{kn} \equiv b^{kn} \mod m \). What does this imply about \( \ell \) in relation to \( kn \)?)

5. (5 points) Exercise Set 5.1, # 7 (a)