Name: _____

1. Suppose G is a group with order $1617 = 3 \cdot 7^2 \cdot 11$.
   (a) Could G contain an element of order 10? Briefly explain.

   (b) Must G contain an element of order 7? Briefly explain.

   (c) If G is abelian, what could G be? List all possibilities (up to isomorphism).

   (d) Which of the possibilities for G described above (part c) has an element of order 49? Briefly explain why it does and why the other(s) do not.