

Math 31: Quiz 4

Name: _____

Instructions: Answer the following questions without consulting any outside source (such as notes or the textbook).

1. What is the order of the group $Z_4 \oplus Z_5$? (i.e. how many elements are there in this group?)

2. Could D_6 have a subgroup of order 5? Why or why not?

3. If $H \leq G$ and $a \in G$, what is the set aH ? Your answer should be of the form:
 $aH = \{\text{_____} s.t. \text{_____}\}$.

Math 31: Quiz 4

Name: _____

Instructions: Answer the following questions without consulting any outside source (such as notes or the textbook).

1. What is the order of the group $Z_4 \oplus Z_5$? (i.e. how many elements are there in this group?)

2. Could D_6 have a subgroup of order 5? Why or why not?

3. If $H \leq G$ and $a \in G$, what is the set aH ? Your answer should be of the form:
 $aH = \{\text{_____} s.t. \text{_____}\}$.