

MG 5860: Visual Group Theory (Summer 2009)
Quiz 7 (20 points)

NAME:

Instructions: Answer each of the following questions completely. If something is unclear, or if you have any questions, then please ask. Good luck!

1. (5 points) Describing regularity of a diagram is fairly difficult. To show me that you understand the concept, draw a diagram with 4 nodes and 2 arrow types that is not regular.

2. (5 points) What is a subgroup?

3. (4 points) Name two subgroups that every group has.

4. (6 points) Find every subgroup of $V_4 = \{e, v, h, vh\}$. The easiest way to write your answers is in terms of the appropriate generators. (Hint: there are 5 of them.)