

Name _____

Mathematics 309a: Abstract Algebra

Winter Semester 2009

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Quiz #5

January 29

Find all the subgroups of Z_{30} and draw the subgroup diagram for the subgroups. There are 8 of them, all cyclic, of course, so you can identify them by their generators, such as $\langle 2 \rangle$.

[Hint: A carefully drawn diagram will look like a cube. It is useful to know that $30 = 2 \cdot 3 \cdot 5$.]