

Name _____

Mathematics 309a: Abstract Algebra

Winter Semester 2009

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Quiz #12

March 24

Definition. A **unit** in a ring is an element in the ring which has a multiplicative inverse.

Describe all the units in the given ring:

A. \mathbb{Z}_5 .

B. \mathbb{Z}_6 .

C. $\mathbb{Z}_5 \times \mathbb{Z}_6$.