

Day 31: Ring Homomorphisms

1. Whiteboard pages 1 through 3.
 - **Page 3:** In the definition, label the $+$ and \cdot operations with R and S .
2. **Work on Day 31 Class Work. Leave 10+ minutes for discussions.**
3. Whiteboard page 4.
 - $5\mathbb{Z}$ is *not* a subring of \mathbb{Z} , since $1 \notin 5\mathbb{Z}$.
4. **Proof of the Day:** Whiteboard page 5.
 - K is also an additive subgroup of R . (Proved in group theory.)