

## Day 26: Introduction to Rings

1. Whiteboard page 1.
2. Whiteboard page 2.
  - Properties 1 through 5 say that  $\mathbb{Z}$  (and  $\mathbb{R}$  and  $\mathbb{Z}_{12}$ ) is a commutative group under addition.
  - We've intentionally left out  $a \cdot b = b \cdot a$ .
  - Property 9 (i.e., the distributive law) is the only one that connects addition and multiplication.
3. Whiteboard pages 3 and 4.
4. **Work on Day 26 Class Work. Leave 15 minutes for discussions.**
5. Whiteboard page 5.
6. **Proof of the Day:** Whiteboard page 6.
7. **(Time permitting)** Whiteboard page 7.