

## Day 12: Order of an Element

1. Whiteboard page 1.
  - Show how to compute successive powers of 3.
  - **Notation:**  $|3| = 6$  or  $\text{ord}(3) = 6$ .
2. Whiteboard page 2.
  - Read about the order of an element in an *additive* group.
3. **Work on Day 12 Class Work. Leave 20 minutes for discussions.**
4. Whiteboard pages 3 through 5.
  - **Page 4:** We'll prove the second implication. (You proved the contrapositive in Problem #6.)
5. **Proof of the Day:** Whiteboard pages 6 and 7.