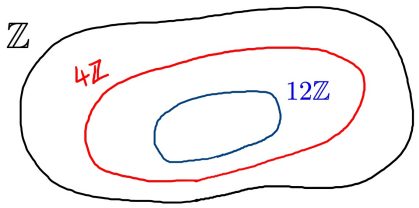
Day 37: When is $F[x]/\langle g(x)\rangle$ a Field, Part II

1. Whiteboard page 1.
   - On a (non-virtual) whiteboard, draw the figure below.



   - Notice how $4\mathbb{Z}$ is *strictly* between $12\mathbb{Z}$ and $\mathbb{Z}$. This isn't possible with $5\mathbb{Z}$.
2. Whiteboard pages 2 and 3.
3. Work on Day 37 Class Work. Leave 10 – 15 minutes for discussions.
   - Leave page 3 up when beginning the post discussion.
4. **Proof (Outline) of the Day:** Whiteboard page 4.
   - See Chapter 37 reading for the motivation behind this proof.