With a partner, answer the following. You should try to explain in your own words, and only resort to the textbook or your notes when both people are stuck. I want you to be talking, and not writing.

1. What is a convergent sequence?

2. What is a convergent series?

3. What does \( \lim_{n \to \infty} a_n = 3 \) mean?

4. What does \( \sum_{n=1}^{\infty} a_n = 3 \) mean?

5. What is a geometric series? Under what circumstances is it convergent? What is its sum?

6. What is a \( p \)-series? Under what circumstances is it convergent?

7. Suppose \( \sum a_n = 3 \) and \( s_n \) is the \( n \)th partial sum of the series. What is \( \lim_{n \to \infty} a_n \)? What is \( \lim_{n \to \infty} s_n \)?

8. State the following tests, and discuss when each should be used.
   - The Test for Divergence
   - The Integral Test
   - The Comparison Test
   - The Limit Comparison Test
   - The Alternating Series Test

9. What is an absolutely convergent series?

10. What is a conditionally convergent series?