Division Algorithm and common divisors (1.25-1.34)

- Well-Ordering Axiom statement.
  - This is not true for the integers, think of examples. Then restate it a bit to make it true for the integers.
  - This is not true for the real numbers, think of examples.
- Example Theorem. Make sure you understand how it works. What is the significance of 7?
- Theorem: The division algorithm. Make sure you clearly understand the statement.
- Example 1.25. Construct other similar examples.
- Theorem 1.26. The example theorem should help you.
- Theorem 1.27.
- Theorem 1.28. What does this theorem tell us about the equivalence classes of congruence?
- Definition: common divisor.
- Question 1.29.
- Question 1.30.
- Definition: greatest common divisor.
  - Provide Examples.
- Definition: relatively prime numbers.
- Exercise 1.31.
- Theorem 1.32.
  - Provide Examples.
  - Can you think of any kind of converse?
- Theorem 1.33. Use the previous theorem.
- Theorem 1.34.