

## Lesson 1 Practice Problems

1. Here is a rule to make a list of numbers: Each number is the sum of the previous two numbers. Start with the numbers 0 and 1, then follow the rule to build a sequence of 10 numbers.
  
2. A sequence starts  $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \dots$ 
  - a. Give a rule that the sequence could follow.
  
  - b. Follow your rule to write the next 3 terms in the sequence.
  
3. A sequence of numbers follows the rule: multiply the previous number by -2 and add 3. The fourth term in the sequence is -7.
  - a. Give the next 3 terms in the sequence.
  
  - b. Give the 3 terms that came before -7 in the sequence.
  
4. A sequence starts 0, 5, ...
  - a. Give a rule the sequence could follow and the next 3 terms for that rule.
  
  - b. Give a *different* rule the sequence could follow and the next 3 terms for that rule.