Algebra 1
Unit 1 Practice Test

1. Evaluate fractions and exponents, including fractions which include variables.
   (This includes a reassessment of the Fraction Quiz from 9/17.)
2. Use and undo the order of operations to create and evaluate expressions and solve simple equations.
3. Use fractions and exponents to see the structure in recursive patterns.

Criterion A: Knowing and Understanding	
Criterion C: Communicating	

1.   Simplify each expression. Use fractions, not decimals. **Show all your work.**

   a. $\left(\dfrac{2}{5}\right)^2 - \dfrac{1}{5} \div \dfrac{1}{2}$ b. $\dfrac{a}{b} + \left(\dfrac{1}{2} \div b\right)$

2.   Write an equation to represent this sentence: "I have a secret number. If I add four to it, then multiply by 3, then divide by 5, then subtract 1.9. The result is 2."
       Then find the secret number: solve the equation by undoing operations.

3.   Make a table to show the length of each segment, the number of segments, and the total length for each stage of the fractal shown. What will the total length of stage 10 be?

Stage 0   Stage 1   Stage 2