Date:

BLM 1.CR.1

Chapter 1 Review

For each question, use the most appropriate tools, computational methods, and problem solving strategies. Provide complete justification for each solution.

- **1.** Describe the pattern for each sequence. List the next three terms in each pattern.
 - a) 0.25, 0.5, 0.75, 1, 1.25
 - **b)** 1, 3, 9, 27, 81
 - c) 6, 2, -2, -6, -10
 - **d)** 6, 8, 12, 18, 26
- 2. a) Write all the fractions with denominator 15 and numerators from 1 to 10. Convert each fraction to a decimal.
 - **b)** Describe the pattern. Use the pattern to predict the decimal equivalents for each fraction: $\frac{11}{15}, \frac{12}{15}, \frac{13}{15}$.

- **3.** What power of (-9) is 43 046 721?
- 4. Provide a counterexample to prove each statement is false.
 - a) The area of a rectangle is always greater than the area of a square with the same perimeter.
 - **b)** All rectangles are squares.
 - c) The sum of two prime numbers is never a prime number.
- 5. Find three consecutive integers that have a sum of -51.