The "Inner Triangle" Pattern

- 1. Record all 4 solutions to the puzzle (sums of 9, 10, 11, 12)
- 2. Find the "inner triangle" sums for each of the solutions (see the figure below).
- 3. What is the relationship between the outer triangle sums and the inner triangle sums? (The relationships become clear when the sums are arranged in a chart.)

Outer triangle sum 10 11 12 Inner triangle sum 15 12 9 6

How else can you represent this relationship? (e.g., plot on a graph)

Try substituting different numbers for 1-6. What do you find now?

