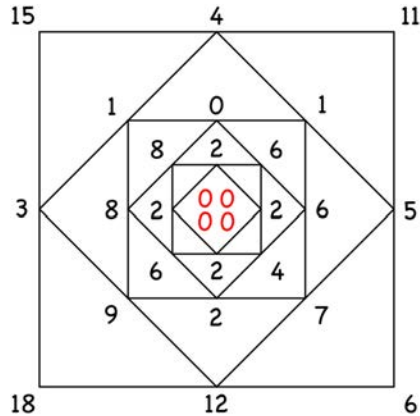


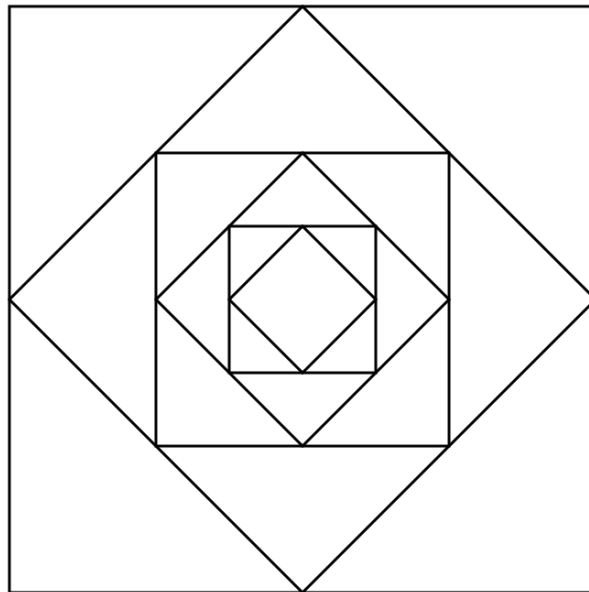
# Puzzle of the Week

## *Difference Squares*

Start by putting numbers in the corners of a square. Then, put the differences of those numbers in the middle of the sides and make a new square with those differences. Continue this process and see where it takes you.



**THE CHALLENGE:** 1) This seems to end with four 0's. If this is always true, can you explain why? 2) The example went to four 0's in the seventh round. Can you find examples that take much longer?



**EXPLORATION:** Investigate what happens if you use pentagons or hexagons instead.