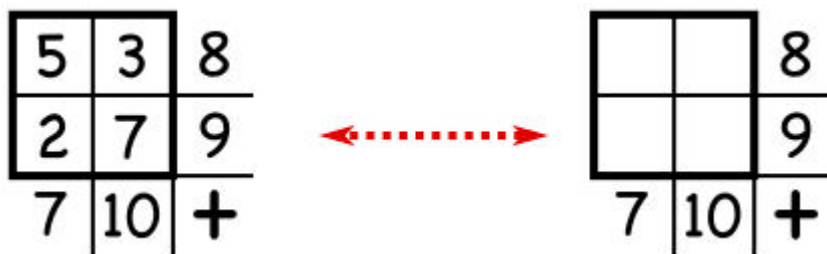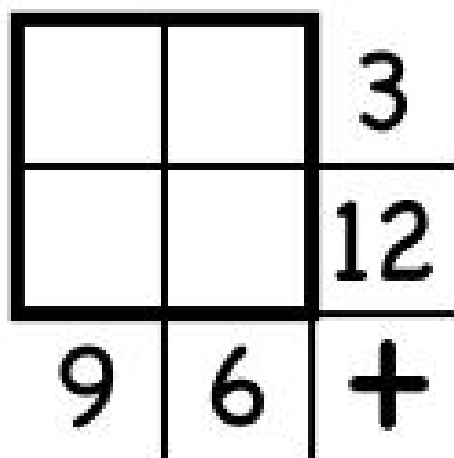# Puzzle of the Week
Square Sums – 1

The rows and columns add up to the numbers on the outside of this 2 by 2 square.

THE CHALLENGE: Using the numbers from 1 to 7, solve for the missing numbers in this square.

1 2 3 4 5 6 7

EXPLORATION: Make a Square Sum challenge for someone else.

Square Sums – 1 – Notes

THE CHALLENGE: Using the smallest and largest numbers helps to narrow down the possibilities.

The only two numbers that add up to 12 are 5 and 7, so they must go along the bottom row.

The only two numbers that add up to 3 are 1 and 2, so they must go along the top row.

The only way to get 6 using 5, 7, 1, and 2 is to add 5 and 1, so they must be in the rightmost column.

At this point, we have the solution: (7 5 12) (2 1 3) (9 6 +).

EXPLORATION: It is easy to make these puzzles. Start by putting four numbers on the inside, find their sums, and then create the puzzle leaving out the four numbers on the inside.

While creating puzzles that way is easy, they aren't always the most fun to solve. To increase the fun, add some restrictions. For example, say that each number is used at most once. Also, restrict the possible numbers by saying they are in a range or that they all have some characteristic, such as all being odd.