

Puzzle of the Week

Fill in the Blanks – 5

Using the numbers from 1 to 5 at most once, this equation has three solutions.

$$\square - \square = \square - \square$$

1 2 3 4 5

The three solutions are:

$$\boxed{3} - \boxed{1} = \boxed{4} - \boxed{2}$$

$$\boxed{4} - \boxed{2} = \boxed{5} - \boxed{3}$$

$$\boxed{4} - \boxed{1} = \boxed{5} - \boxed{2}$$

THE CHALLENGE: Use each of the numbers from 0 to 9 at exactly once to fill in these blanks.

$$\square + \square = \square + \square = \square + \square = \square + \square = \square + \square$$

0 1 2 3 4 5 6 7 8 9

EXPLORATION: Can you solve similar puzzles that break up a number range into common sums? How about four pairs using the numbers 0 to 7 or 1 to 8? How about 3 triplets from 0 to 8 or 1 to 9? How about 2 groups of 5 for the numbers from 0 to 9? Do you see any patterns for when it works and when it doesn't?