



# Gordon Burgin's Puzzles

## October 2023 challenge

### Puzzle One

The price of an item was increased by 25% and later decreased by 25%, which makes the price of the item \$375. What was the original price?

### Puzzle Two

If  $\frac{3}{4}$  of Peter's salary is equal to  $\frac{2}{4}$  of Mary's salary. What is Peter's salary if Mary's salary is £120,000?

### Puzzle Three

418 marbles are initially shared among three kids A, B and C. A got half the amount of C's share which is 3 times B's share. If A now wins 35 marbles from B and loses 8 marbles to B in a game of marbles how many marbles do each now have?

### Puzzle Four

There is a three-digit number. The second digit is four times as big as the third digit (no zeros) while the first digit is three less than the second digit. What is the three-digit number?