



# Gordon Burgin's Puzzles

## June 2023 challenge

### Puzzle One

Two trains are heading toward each other. The first train is traveling at 60 mph and the second train is traveling at 40 mph. The distance between the two trains is 500 miles. If they started at the same time, how long will it take before they collide?

### Puzzle Two

If the third term of an arithmetic sequence is 15 and the eighth term is 40, what is the 20th term?

### Puzzle Three

The sum of two numbers is 25. If three times the first number is subtracted from twice the second number, the result is 7. What are the two numbers?

### Puzzle Four

Find the numerical equivalent for the following alphameric expressions to satisfy the equations below:

- A.  $XYZ + XZY = ZYX$
- B.  $EAT + THAT = APPLE$