

Notes: Code cracker

9 to 11

Solution

$$A = 4$$

$$B = 8$$

$$C = 9$$

$$D = 1$$

$$E = 3$$

$$F = 6$$

$$G = 5$$

$$DG \times FE = 15 \times 63 = 945 = CAG$$

Notes

One way to solve this puzzle is to start by considering the only possibilities for A and B, which are 3 and 6, or 4 and 8.

If $A = 3$, then $A \times A$ cannot be DF, which is a two-digit number.

Therefore A is 4 and B is 8.

Since $C + C$ is a two-digit number ending in B (8), C must be 9, $C \times C = 81$, and D must be 1.

Since $A + C = 4 + 9 = 13$, DE is 13 and E is 3.

Since $A \times C = 4 \times 9 = 36$, EF is 36 and F is 6.

G must therefore be 5.

Use knowledge of number bonds and times-tables
Think logically to eliminate what won't work