## MULTIPLYING WHEN SUM OF ONES' DIGITS IS TEN AND TENS DIGITS ARE EQUAL

Problem: 85 X 85 = ?

- Method: 1. Multiply the ones' digits to get the tens' and ones' digits in the answer.
  - Add one to one tens' digit and multiply by the other. Write product down to the left of #1 answer.

Solve: 1.  $5 \times 5 = 25$ 

8 + 1 = 9 and 8 x 9 = 72
 Write 72 to the left of 25.

7225 Answer

Or:  $43 \times 47 = ?$ 

- 1.  $3 \times 7 = 21$  Write down.
- 2. 4 + 1 = 5 and 5 x 4 = 20 Write 20 to left of #1 results:

2021 Answer

## TRY THESE:

- 1.  $75 \times 75 =$
- 2.  $35 \times 35 =$
- $3.72 \times 78 =$
- 4.  $41 \times 49 =$
- 5.  $83 \times 87 =$
- 6.  $64 \times 66 =$

## MULTIPLYING FACTORS EQUAL DISTANCE FROM NUMBER

Problem:

38 x 42 = ?

- Method: 1. Square the difference each factor is from the midway number.
  - Square the midway number.
  - Subtract the product in #1 from the square of the midway number in #2.
  - Solve: 1. Square 2, the distance 38 and 42 are from 40, the midway number.
    - Square the midway number, 40 to get 1600.
    - Subtract square in #1 and #2.
      1600 4 = 1596 Answer

## TRY THESE:

- 1. 53 x 47 =
- 2. 62 x 58 =
- 3.  $21 \times 19 =$

84 x 76 =

4.

- 5. 69 x 71 =
- 6.  $79 \times 81 =$
- 7. 89 x 91 =
- 8.  $5.9 \times 6.1 =$
- 9.  $52 \times 58 =$
- 10.  $34 \times 36 =$