**Problem.** find value of n. 8 (3+5)=(8 x 3)+(8xn).

**Solution (Case 1).** If symbol "x" denotes product and "8 (3+5)" means $8 \times (3 + 5)$, then equation can be written, as

$$8 \times (3 + 5) = (8 \times 3) + (8 \times n).$$

Then

$$8 \times 8 = 24 + 8 \times n$$

or

$$64 = 24 + 8 \times n$$

or

$$40 = 8 \times n$$

or

$$n = 40 \div 8 = 5.$$

**Answer (Case 1):** $n = 5$.

**Solution (Case 2).** If symbol "x" in the problem denotes variable and "8 (3+5)" means $8 \times (3 + 5)$, then equation can be written, as

$$8 \cdot (3 + 5) = (8x3) + (8xn).$$

Then

$$8 \cdot 8 = 24x + 8xn$$

or

$$64 - 24x = 8xn$$

or

$$n = \frac{64 - 24x}{8x}.$$

**Answer (Case 2):** $n = \frac{64-24x}{8x}$.