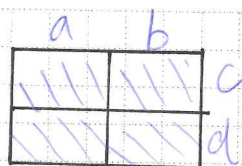


= k.

1. 分配律

$$(a+b)(c+d) = ac + ad + bc + bd$$



2. 乘法公式

$$(1) (a+b)^2 = a^2 + 2ab + b^2$$

$$= (a+b)(a+b) \text{ 和的平方}$$

$$(2) (a-b)^2 = a^2 - 2ab + b^2$$

$$= (a-b)(a-b) \text{ 差的平方}$$

$$(3) a^2 - b^2 = (a+b) \times (a-b) \text{ 平方差}$$

Ex. (1) 1997×1998

$$= (2000 - 3)(2000 - 2)$$

$$= 3990006 \#$$

(2) $(49 \frac{3}{4})^2$

$$= (50 - \frac{1}{4})^2$$

$$= 50^2 + 2 \times 50 \times \frac{1}{4} + \frac{1}{4}^2$$

$$= 2495 \frac{1}{16} \#$$

(3) $119^2 - 19^2$

$$= (119 + 19)(119 - 19)$$

$$= 13800 \#$$

(4) $(100 \frac{1}{4})^2$

$$= (100 + \frac{1}{4})^2$$

$$= 10000 + \frac{1}{16} + 50$$

$$= 10050 \frac{1}{16} \#$$

(5) $\frac{12^2 - 28^2}{12^2 + 12 \times 56 + 28^2}$

分子、分母分開處理

$$= \frac{(12 + 28)(12 - 28)}{(12 + 28)^2}$$

$$= \frac{100 \times 44}{100^2}$$

$$= \frac{4400}{10000} = \frac{44}{100} = \frac{11}{25} \#$$