

A20 B151(146) C52118(1-61) D32

Vol. I 9124

人 一 得 以 人 六 得 以  
 得 十 九 二 得 人 一 九  
 五 八 百 十 一 分 百 乘  
 十 人 七 七 十 之 八 一  
 四 分 十 乘 八 十  
 之 二 三 二  
 十 六

Multiplying twelve by nine resulteth in one hundred ~~and~~ eight.  
 With six people sharing it, each person receiveth eighteen.

Multiplying thirty-six by twenty-seven resulteth in  
 nine hundred ~~and~~ seventy-two.

~~With~~ With eighteen people sharing it,  
 each person receiveth fifty-four.

~~$$9 \times 12 = 108 \quad 108 / 6 = 18$$~~

~~$$27 \times 36 = 972 \quad 972 / 18 = 54$$~~

~~$$12 \times 9 = 108 \quad 108 / 6 = 18$$~~

$$12 \times 9 = 108$$

$$108 / 6 = 18$$

$$36 \times 27 = 972$$

$$972 / 18 = 54$$

2019.0603

人四得一人一得一人五得一人  
 得百七七得百七十二得十八八  
 一八十百四六萬百一四千十  
 千十萬二百十八四百人七一  
 四六八十十八二千十六分百乘  
 百人千九十八人七三十之，四一  
 五分五乘六分百乘二。十百  
 十之，百九，之，三三。八八，  
 八。八百。十百。  
 十七  
 八十二  
 二。

二。二 Bern. has 「六十二」  
 十 for 「一百六十二」  
 十四，

$$108 \times 81 = 8748 \quad 324 \times 243 = 78732 \quad 972 \times 729 = 708588$$

$$8748 / 54 = 162 \quad 78732 / 162 = 486 \quad 708588 / 486 = 1458$$

Multiplying one hundred and eight by eighty-one resulteth in eight thousand, seven hundred and forty-eight. With fifty-four people sharing it, each person receiveth one hundred and sixty-two. Multiplying three hundred and twenty-four by two hundred and forty-three, resulteth in seventy-eight thousand, seven hundred and thirty-two. With one hundred and sixty-two people sharing it, each person receiveth four hundred and eighty-six. Multiplying nine hundred and seventy-two by seven hundred and twenty-nine, resulteth in seven hundred and eight thousand, five hundred and eighty-eight. With four hundred and eighty-six people sharing it, each person receiveth one thousand, four hundred and fifty-eight.

Multiplying two thousand, nine hundred and sixteen by two thousand, one hundred and eighty-seven, resulteth in six million, three hundred and seventy-seven thousand, two hundred and ninety-two. With one thousand, four hundred and fifty-eight people sharing it, each person receiveth four thousand, three hundred and seventy-four.

$$2916 \times 2187 = 6377292$$

$$6377292 / 1458 = 4374$$

七 分 一 七 得 乘 以  
十 之, 千 千 六 二 二  
四: 人 四 二 百 千 千  
得 百 百 三 九 一  
四 五 九 十 百 百  
千 十 十 七 一 八  
三 八 二 萬 十 十  
百 人 六, 七

A. em. has 「七千九百十二」 for 「七千二百九十二」.

Multiplying eight thousand, seven hundred and forty-eight by six thousand, five hundred and sixty-one resulteth in fifty-seven million, three hundred and ninety-five thousand, six hundred and twenty-eight. With four thousand, three hundred and seventy-four people sharing it, each person receiveth thirteen thousand, one hundred and twenty-two.

人 萬 得 乘 以  
三 分 四 五 五 八 六  
千 之, 千 千 千 千 千  
一 人 三 六 七 七 五  
百 得 百 百 百 百 百  
二 一 七 二 三 四 六  
十 萬 十 十 十 十 十  
二。 四 八 九 八, 一

$$8748 \times 6561 = 57395628$$

$$57395628 / 4374 = 13122$$

20190603

$$26244 \times 19683$$

$$= 516\,560\,652$$

$$516\,560\,652 / 13122$$

$$= 39\,366$$

六分一萬得乘以  
 十之, 萬六五二一  
 六, 人三百億萬萬  
 得千五一六九  
 三一十千千千  
 萬百二六二六  
 九二 百百百  
 千十 五四八  
 三二 十十十  
 百人 六四三

Multiplying twenty-six thousand, two hundred and forty-four, by nineteen thousand, six hundred and eighty-three resulteth in five hundred and sixteen million, five hundred and sixty thousand, six hundred and fifty-two. With thirteen thousand, one hundred and twenty-two people sharing it, each person receiveth thirty-nine thousand, three hundred and sixty-six.

20190603

千 人 萬 得 乘 以  
 九 分 三 五 四 七 五  
 十 之 萬 千 十 萬 萬  
 八 人 九 八 六 八 九  
 得 千 百 億 千 千  
 一 三 六 四 七 四  
 十 百 十 千 百 十  
 一 六 八 九 三 九  
 萬 十 百 十  
 八 六 四 二,

Multiplying seventy-eight thousand, seventy hundred and thirty-two  
 by fifty-nine thousand and forty-nine resulteth in four billion,  
 six hundred and forty-nine million, forty-five thousand, eight  
 hundred and sixty-eight.

~~and~~ with thirty-nine thousand, three hundred and sixty-six people  
 sharing it, each person receiveth one hundred and ~~ten thousand~~  
 eighteen thousand and ninety-eight.

$$78732 \times 59049 = 4649045868$$

$$4649045868 / 39366 = 118098$$



20190603

十	三	十	得	乘	以	以
四	人	一	一	四	二	一
得	十	萬	百	十	十	萬
三	一	二	一	三	七	萬
十	萬	千	十	萬	萬	
五	八	八	八	六	七	
萬	千	百	億	千	千	
四	九	一	四	一	一	
千	十	十	千	百	百	
二	八	二	一	九	四	
百	人		百	十	十	
九	分		四	六	七	

Multiplying two hundred and thirty-six thousand, one hundred and ninety-six by one hundred and seventy-seven thousand, one hundred and forty-seven, resulteth in forty-one billion, eight hundred and forty-one million, four hundred and twelve thousand, eight hundred and twelve.

With one hundred and eighteen thousand and ninety-eight people sharing it, each person receiveth three hundred and fifty-four thousand, two hundred and ninety-four.

$$236196 \times 177147 = 41841412812$$

$$41841412812 / 118098 = 354294$$

20190603

(A note on the patterns

The divisions have been selected to ~~form~~ <sup>result</sup> in integers.

From  $\mathcal{Q}13$  to  $\mathcal{Q}23$ , we have

$$\frac{(mn) \times (mn)}{m} = n \cdot n^2,$$

$$n = 9, 8, \dots, 1; m = n, \dots, 1.$$

And 「右  $n \cdot n$  - 條」:

$$\frac{(n \times n + (n-1) \times n + \dots + 1 \times n)^2}{n}$$

$$= \frac{1}{n} \left[ n \cdot \frac{n(n+1)}{2} \right]^2$$

$$= n \cdot \left[ \frac{n(n+1)}{2} \right]^2$$

Probably showable for end of  $\mathcal{Q}23$  too

For  $\mathcal{Q}24$ :

$$\frac{(4 \cdot 3^n) \times (3^{n+1})}{(2 \cdot 3^n)} = 2 \cdot 3^{n+1}$$

$$\left[ \sum_{n=1}^9 \frac{n \cdot (n+1)}{2} \right]^2$$

Can't be bothered

百人

八分三

十之十

二五

得萬

一四

百千

六二

萬百

二九

千十

八四

~~百~~~~七~~~~十~~~~一~~~~萬~~~~五~~~~千~~~~三~~~~百~~~~八~~~~千~~~~二~~~~八~~

百得乘以

七三七五

十千十十

一七三

萬百萬萬

五六八一

千十千千

三五五四

百億百百

八七八四

千十十

二八

一

Multiplying seven hundred and eight thousand, five hundred and eighty-eight by five hundred and thirty-one thousand, four hundred and sixty-one, resulteth in three hundred and seventy-six billion, five hundred and seventy-two million, seven hundred and fifteen thousand, three hundred and eight.

With three hundred and fifty-four thousand, two hundred and ninety-four people sharing it, each person receiveth one million, sixty-two thousand, eight hundred and eighty-two.

$$708588 \times 531441 = 376572715308$$

$$376572715308 / 354294 = 1062882$$

END  $\mathcal{Q}24$ 

END Volume I