Система быстрого счета в уме Якова Трахтенберга

ВТОРОЙ СЕМЕСТР
ЗАНЯТИЕ 3

ТЕМА 13 – ТРЁХЗНАЧНЫЕ МНОЖИТЕЛИ

$$\begin{array}{l} 000213 \times 121 \\ \hline 25773 \end{array}$$

1 шаг: $3 \times 1 = 3$

2 шаг: $0002\underline{1}\underline{\underline{3}} \times 1\underline{\underline{2}}\underline{1} \rightarrow (1 \times 1) + (2 \times 3) = 7$

3 шаг: $000\underline{2}\underline{\underline{1}}\underline{\underline{\underline{3}}} \times \underline{\underline{\underline{1}}}\underline{\underline{2}}\underline{1} \rightarrow \left.\begin{array}{l} 2 \times 1 = 2 \\ 1 \times 2 = 2 \\ 3 \times 1 = 3 \end{array}\right\} = 7$

4 шаг: $00\underline{0}\underline{\underline{2}}\underline{\underline{\underline{1}}}3 \times \underline{\underline{\underline{1}}}\underline{\underline{2}}\underline{1} \rightarrow \left.\begin{array}{l} 0 \times 1 \\ 2 \times 2 \\ 1 \times 1 \end{array}\right\} = 5$

5 шаг: $0\underline{0}\underline{\underline{0}}\underline{\underline{\underline{2}}}13 \times \underline{\underline{\underline{1}}}\underline{\underline{2}}\underline{1} \rightarrow \left.\begin{array}{l} 0 \times 1 \\ 0 \times 2 \\ 2 \times 1 \end{array}\right\} = 2$

$\boxed{Rez = 25773}$

$$\underline{0\,0\,0\,7\,2\,8 \times 1\,2\,3}$$

$$8\,9\,5\,4\,4$$

1) $8 \times 3 = \underset{*}{2}4$

2) $(2 \times 3) + (8 \times 2) = 22 \rightarrow 22 + \underset{*}{2} = \underset{*}{2}4$

3) $(7 \times 3) + (2 \times 2) + (8 \times 1) = 33 \rightarrow 33 + \underset{*}{2} = \underset{*}{3}5$

4) $(0 \times 3) + (7 \times 2) + (2 \times 1) = 16 \rightarrow 16 + \underset{*}{3} = \underset{*}{1}9$

5) $(0 \times 3) + (0 \times 2) + (7 \times 1) = 7 \rightarrow 7 + \underset{*}{1} = 8$

$$\boxed{\text{Rez} = 89544}$$

$$\begin{array}{l} \underline{0\,0\,0\,4\,8\,7 \times 5\,4\,3} \\ 2\,6\,4\,4\,4\,1 \end{array}$$

1) $7 \times 3 = \underset{*}{2}1$

2) $(8 \times 3) + (7 \times 4) = 52 \rightarrow 52 + 2 = \underset{*}{5}4$

3) $(4 \times 3) + (8 \times 4) + (7 \times 5) = 12 + 32 + 35 = 79 + \underset{*}{5} = \underset{*}{8}4$

4) $(0 \times 3) + (4 \times 4) + (8 \times 5) = 0 + 16 + 40 \rightarrow 56 + \underset{*}{8} = \underset{*}{6}4$

5) $(0 \times 3) + (0 \times 4) + (4 \times 5) = 20 \rightarrow 20 + \underset{*}{6} = \underset{*}{2}6$

6) $(0 \times 5) + (0 \times 4) + (0 \times 3) \rightarrow 0 + \underset{*}{2} = 2$

$\boxed{\text{Rez} = 264\,441}$

$$\begin{array}{r} 0008527 \times 346 \\ \hline 2950342 \end{array}$$

1) $7 \times 6 = \underset{*}{4}2$

2) $(2 \times 6) + (7 \times 4) = 12 + 28 \rightarrow 40 + \underset{*}{4} = \underset{*}{4}4$

3) $(5 \times 6) + (2 \times 4) + (7 \times 3) = 30 + 8 + 21 \rightarrow 59 + \underset{*}{4} = \underset{*}{6}3$

4) $(8 \times 6) + (5 \times 4) + (2 \times 3) = 48 + 20 + 6 \rightarrow 74 + \underset{*}{6} = \underset{*}{8}0$

5) $(0 \times 6) + (8 \times 4) + (5 \times 3) = 0 + 32 + 15 \rightarrow 47 + 8 = \underset{*}{5}5$

6) $(0 \times 6) + (0 \times 4) + (8 \times 3) = 24 \rightarrow 24 + \underset{*}{5} = \underset{*}{2}9$

1) 376 × 138

2) 543 × 271

3) 894 × 123

4) 5234 × 236

5) 3182 × 214

6) 2133 × 321

7) 35242 × 143

Продолжение следует!

До новых встреч!

Удачи всем и во всём!