

习题八

1. 在下列乘法算式的空格内各填入一个合适的数字，使算式成立。

$$\begin{array}{r} 2\square5 \\ \times \square6\square \\ \hline \square4\square \\ 1\square1\square \\ \square6\square5 \\ \hline 1\square9\square4\square \\ \square\square\square\square \\ \times \quad \quad 6 \\ \hline \square4\square4 \end{array}$$

$$\begin{array}{r} A\ B \\ \times B\ A \\ \hline \square\square4 \\ \square\square4 \\ \hline \square\square\square4 \\ \square\square8 \\ \times \quad \square \\ \hline 31\square2 \end{array}$$

2. 在下列除法算式的空格内各填入一个合适的数字，使算式成立。

$$\begin{array}{r} 1\square \\ \square\square\square \overline{) 1\square2} \\ \square\square \\ \hline \square2 \\ \square\square \\ \hline 0 \end{array}$$

$$\begin{array}{r} 3\square \\ \square6 \overline{) 14\square\square} \\ \square\square8 \\ \hline \square\square \\ \square2 \\ \hline 0 \end{array}$$

$$\begin{array}{r} \square8\square \\ \square\square\square2 \overline{) 110768} \\ \square\square\square\square \\ \hline \square\square6 \\ \square\square\square \\ \hline \square\square\square8 \\ \square\square\square\square \\ \hline 0 \end{array}$$

$$\begin{array}{r}
 2\square\square \\
 \textcircled{4}\square4\square \overline{) \square\square\square\square\square} \\
 \underline{\square\square4} \\
 \square\square\square\square \\
 \underline{\square\square4} \\
 4\square\square \\
 \underline{\square\square\square} \\
 0
 \end{array}$$

3. 某数的个位数字为 2，若把 2 换到此数的首位，则此数增加一倍，问原来这个数最小是多少？

4. 一个四位数被一位数 A 除得 (1) 式，被另一个一位数 B 除得 (2) 式，求这个四位数。

$$\begin{array}{r}
 \phantom{\textcircled{1}} \overline{) \begin{array}{c} \times \times \times \\ \times \times \times \times \end{array}} \\
 \phantom{\textcircled{1}} \phantom{\overline{) \times \times \times \times}} \times \\
 \phantom{\textcircled{1}} \phantom{\overline{) \times \times \times \times}} \times \times \\
 \phantom{\textcircled{1}} \phantom{\overline{) \times \times \times \times}} \times \\
 \phantom{\textcircled{1}} \phantom{\overline{) \times \times \times \times}} \times \times \\
 \phantom{\textcircled{1}} \phantom{\overline{) \times \times \times \times}} \times \times \\
 \phantom{\textcircled{1}} \phantom{\overline{) \times \times \times \times}} 0
 \end{array}$$

$$\begin{array}{r}
 \phantom{\textcircled{2}} \overline{) \begin{array}{c} \times \times \times \\ \times \times \times \times \end{array}} \\
 \phantom{\textcircled{2}} \phantom{\overline{) \times \times \times \times}} \times \times \\
 \phantom{\textcircled{2}} \phantom{\overline{) \times \times \times \times}} \times \times \\
 \phantom{\textcircled{2}} \phantom{\overline{) \times \times \times \times}} \times \times \\
 \phantom{\textcircled{2}} \phantom{\overline{) \times \times \times \times}} 0
 \end{array}$$

5. 在右面的“□”内填入 1~8（每个数字必须用一次），使算式成立。

$$\begin{array}{r}
 \square\square\square \\
 \times \quad \square \\
 \hline
 \square\square\square\square
 \end{array}$$

习题八解答

1.

$$\begin{array}{r}
 \textcircled{1} \quad \begin{array}{r}
 2\ \boxed{3}\ 5 \\
 \times \boxed{7}\ \boxed{6}\ \boxed{4} \\
 \hline
 \boxed{9}\ \boxed{4}\ \boxed{0} \\
 1\ \boxed{4}\ 1\ \boxed{0} \\
 \boxed{1}\ \boxed{6}\ \boxed{4}\ 5 \\
 \hline
 1\ \boxed{7}\ 9\ \boxed{5}\ 4\ \boxed{0}
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \textcircled{2} \quad \begin{array}{r}
 7\ 2 \\
 \times 2\ 7 \\
 \hline
 \boxed{5}\ \boxed{0}\ 4 \\
 \boxed{1}\ \boxed{4}\ 4 \\
 \hline
 \boxed{1}\ \boxed{9}\ \boxed{4}\ 4
 \end{array}
 \quad \text{或} \quad
 \begin{array}{r}
 3\ 8 \\
 \times 8\ 3 \\
 \hline
 \boxed{1}\ \boxed{1}\ 4 \\
 \boxed{3}\ \boxed{0}\ 4 \\
 \hline
 \boxed{3}\ \boxed{1}\ \boxed{5}\ 4
 \end{array}
 \end{array}$$

③共有十三个解.

$$\begin{array}{r}
 \boxed{1}\ \boxed{0}\ \boxed{7}\ \boxed{4} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{6}\ \boxed{4}\ \boxed{4}\ 4
 \end{array}
 \quad
 \begin{array}{r}
 \boxed{1}\ \boxed{4}\ \boxed{0}\ \boxed{4} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{8}\ \boxed{4}\ \boxed{2}\ 4
 \end{array}
 \quad
 \begin{array}{r}
 \boxed{1}\ \boxed{4}\ \boxed{1}\ \boxed{4} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{8}\ \boxed{4}\ \boxed{8}\ 4
 \end{array}$$

$$\begin{array}{r}
 \boxed{1}\ \boxed{2}\ \boxed{3}\ \boxed{4} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{7}\ \boxed{4}\ \boxed{0}\ 4 \\
 \boxed{1}\ \boxed{0}\ \boxed{7}\ \boxed{9} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{6}\ \boxed{4}\ \boxed{7}\ 4
 \end{array}
 \quad
 \begin{array}{r}
 \boxed{1}\ \boxed{2}\ \boxed{4}\ \boxed{4} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{7}\ \boxed{4}\ \boxed{6}\ 4 \\
 \boxed{1}\ \boxed{4}\ \boxed{0}\ \boxed{9} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{8}\ \boxed{4}\ \boxed{5}\ 4
 \end{array}
 \quad
 \begin{array}{r}
 \boxed{1}\ \boxed{5}\ \boxed{7}\ \boxed{4} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{9}\ \boxed{4}\ \boxed{4}\ 4 \\
 \boxed{1}\ \boxed{2}\ \boxed{3}\ \boxed{9} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{7}\ \boxed{4}\ \boxed{3}\ 4
 \end{array}$$

$$\begin{array}{r}
 \boxed{1}\ \boxed{2}\ \boxed{4}\ \boxed{9} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{7}\ \boxed{4}\ \boxed{9}\ 4
 \end{array}
 \quad
 \begin{array}{r}
 \boxed{1}\ \boxed{5}\ \boxed{7}\ \boxed{9} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{9}\ \boxed{4}\ \boxed{7}\ 4
 \end{array}
 \quad
 \begin{array}{r}
 \boxed{1}\ \boxed{0}\ \boxed{6}\ \boxed{9} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{6}\ \boxed{4}\ \boxed{1}\ 4
 \end{array}$$

$$\begin{array}{r}
 \boxed{1}\ \boxed{5}\ \boxed{6}\ \boxed{9} \\
 \times \quad \quad 6 \\
 \hline
 \boxed{9}\ \boxed{4}\ \boxed{1}\ 4
 \end{array}$$

④共有四个解。

2.

共六个解。

$$\begin{array}{r}
 \textcircled{4} \quad \begin{array}{r} \boxed{1} \boxed{4} \boxed{2} \end{array} \overline{) \begin{array}{r} \boxed{3} \boxed{8} \boxed{7} \boxed{6} \boxed{6} \\ \underline{\boxed{2} \boxed{8} \boxed{4}} \\ \boxed{1} \boxed{0} \boxed{3} \boxed{6} \\ \underline{\boxed{9} \boxed{9} \boxed{4}} \\ \boxed{4} \boxed{2} \boxed{6} \\ \underline{\boxed{4} \boxed{2} \boxed{6}} \\ 0 \end{array}
 \end{array}$$

3. 原数最小是 105263157894736842。

4. 当 A=3, B=2 时, 这个四位数为 1014, 当 A=9, B=5 时, 这个四位数为 1035。

5. 有两个解。

$$\begin{array}{r}
 \boxed{5} \boxed{8} \boxed{2} \\
 \times \quad \boxed{3} \\
 \hline
 \boxed{1} \boxed{7} \boxed{4} \boxed{6}
 \end{array}
 \qquad
 \begin{array}{r}
 \boxed{4} \boxed{5} \boxed{3} \\
 \times \quad \boxed{6} \\
 \hline
 \boxed{2} \boxed{7} \boxed{1} \boxed{8}
 \end{array}$$