

Column Addition

$$325 + 4217$$

$$\begin{array}{r} 3 2 5 \\ + 4 2 1 7 \\ \hline 4 2 1 7 \end{array}$$

Step 1

Write the numbers in the correct columns. Doesn't matter which order, but they must be in the correct columns.

Step 2

Start on the left, and add the numbers together. $5 + 7 = 12$ so the 2 goes in the units column, and the one goes below the 10s column.

$$\begin{array}{r} 3 2 5 \\ + 4 2 1 7 \\ \hline 4 2 1 2 \\ 1 \end{array}$$

Step 3

Add the 10s column. Don't forget the 1 at the bottom. $2 + 1 + 1 = 4$

$$\begin{array}{r} 3 2 5 \\ + 4 2 1 7 \\ \hline 4 2 1 2 \\ 1 \end{array}$$

Step 4

Add the 100s column. $3 + 2 = 5$

$$\begin{array}{r} 3 2 5 \\ + 4 2 1 7 \\ \hline 4 5 4 2 \\ 1 \end{array}$$

Step 5

The 4 is the only number in the 1000s column.

$$\begin{array}{r} 3 2 5 \\ + 4 2 1 7 \\ \hline 5 4 2 \\ 1 \end{array}$$

$$1935 \div 9 = 215$$

Division

$$1935 \div 9$$

$$9 \overline{) 1935}$$

Step 1

Write the 1935 'under the bus stop' and the 9 on the outside.

Step 2

9 doesn't go into 1, so carry the 1 over to make 19.

$$9 \overline{) 1^1 9 3 5}$$

Step 3

Two 9's go into 19, remainder is 1. Carry the 1 to the 3.

$$9 \overline{) 1^1 9^2 3 5}$$

Step 4

One 9 in 13, remainder is 4. Carry the 4 to the 5.

$$9 \overline{) 1^1 9^2 1^4 3 5}$$

Step 5

There are five 9s in 45.

$$9 \overline{) 1^1 9^2 1^4 3^5 5}$$

Column Subtraction

$$325 - 186$$

$$\begin{array}{r} 3 2 5 \\ - 1 8 6 \\ \hline 3 2 5 \end{array}$$

Step 1

Write the numbers in the correct columns. The first number must be at the top.

Step 2

5 is less than 6 so borrow a 1 from the 2 to make 15, then do $15 - 6 = 9$

$$\begin{array}{r} 3 2 5 \\ - 1 8 6 \\ \hline 3 9 9 \end{array}$$

Step 3

1 is less than 8 so borrow a 1 from the 3 to make 11, then do $11 - 8 = 3$

Step 3

$$2 - 1 = 1$$

$$325 - 186 = 139$$

$$\begin{array}{r} 3 2 5 \\ - 1 8 6 \\ \hline 3 9 9 \end{array}$$

$$\begin{array}{r} 3 2 5 \\ - 1 8 6 \\ \hline 1 3 9 \end{array}$$

Long Multiplication

$$371 \times 42$$

$$\begin{array}{r} 3 7 1 \\ 4 2 \\ \hline 7 4 2 \end{array}$$

Step 1

Begin by doing $2 \times 1 = 2$ and writing the answer in the units column.

Step 2

Next, do $2 \times 7 = 14$, and write like this.

$$\begin{array}{r} 3 7 1 \\ 4 2 \\ \hline 7 4 2 \end{array}$$

Step 3

2×3 add the 1 makes 7.

Step 4

Before repeating the process with the 4, place a 0 in the units column.

$$\begin{array}{r} 3 7 1 \\ 4 2 \\ \hline 7 4 2 \\ 1 4 8 4 0 \\ \hline 1 5 5 8 2 \end{array}$$

$$\begin{array}{r} 3 7 1 \\ 4 2 \\ \hline 7 4 2 \end{array}$$

Step 5

$4 \times 1 = 4$, and then $4 \times 7 = 28$, then 4×3 and the 2 makes 14. Add the two rows together.

$$371 \times 42 = 15,582$$