

LONG SUBTRACTION

Subtract by Regrouping

Objective: Subtract each column. When the top digit is too small, borrow ten from the next column.

INSTRUCTION

Start with the ones. If the top number is smaller, borrow ten from the next column, cross it out, then subtract.

EXAMPLE

Follow the steps to solve it.

1 Subtract the ones

1 - 8 is too small - borrow a ten.

The tens is 0, so borrow from the hundreds first.

$$11 - 8 = 3$$

$$\begin{array}{r} 8911 \\ 6\cancel{0}\cancel{0}\cancel{0} \\ -4918 \\ \hline 3 \end{array}$$

2 Subtract the tens

$$9 - 1 = 8$$

$$\begin{array}{r} 8911 \\ 6\cancel{0}\cancel{0}\cancel{0} \\ -4918 \\ \hline 83 \end{array}$$

3 Subtract the hundreds

9 - 9 is too small - borrow a ten.

$$18 - 9 = 9$$

$$\begin{array}{r} 518911 \\ \cancel{0}\cancel{0}\cancel{0}\cancel{0} \\ -4918 \\ \hline 983 \end{array}$$

4 Subtract the thousands

$$5 - 4 = 1$$

$$\begin{array}{r} 518911 \\ \cancel{0}\cancel{0}\cancel{0}\cancel{0} \\ -4918 \\ \hline 1983 \end{array}$$

5 Final answer

$$\begin{array}{r} 518911 \\ \cancel{0}\cancel{0}\cancel{0}\cancel{0} \\ -4918 \\ \hline 1983 \end{array}$$

$$6901 - 4918 = 1983$$

1983 is the difference!

INDEPENDENT PRACTICE

Solve each one. Write the answer below the line.

1.
$$\begin{array}{r} 7915 \\ -6308 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 7108 \\ -5451 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 9368 \\ -6627 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 9520 \\ -5384 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 9731 \\ -2312 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 6172 \\ -5352 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 8782 \\ -6557 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 1295 \\ -1189 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 3234 \\ -2540 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 9072 \\ -7953 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 5719 \\ -3262 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 5040 \\ -4291 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 4756 \\ -2090 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 8162 \\ -1225 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 6110 \\ -5177 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 8640 \\ -3676 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 7491 \\ -2501 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 4739 \\ -1919 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 6922 \\ -6124 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 9386 \\ -2539 \\ \hline \end{array}$$

I solved by: started with the ones borrowed a ten checked my work

TEACHER EDITION

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EXAMPLE

Follow the steps to solve it.

1 Subtract the ones

1 - 8 is too small - borrow a ten.
The tens is 0, so borrow from the hundreds first.
11 - 8 = 3

$$\begin{array}{r} \overset{8}{\cancel{0}} \overset{9}{\cancel{0}} \overset{11}{\cancel{1}} \\ - 4918 \\ \hline 3 \end{array}$$

2 Subtract the tens

9 - 1 = 8

$$\begin{array}{r} \overset{8}{\cancel{0}} \overset{9}{\cancel{0}} \overset{11}{\cancel{1}} \\ - 4918 \\ \hline 83 \end{array}$$

3 Subtract the hundreds

9 - 9 is too small - borrow a ten.
18 - 9 = 9

$$\begin{array}{r} \overset{5}{\cancel{5}} \overset{18}{\cancel{0}} \overset{9}{\cancel{0}} \overset{11}{\cancel{1}} \\ - 4918 \\ \hline 983 \end{array}$$

4 Subtract the thousands

5 - 4 = 1

$$\begin{array}{r} \overset{5}{\cancel{5}} \overset{18}{\cancel{0}} \overset{9}{\cancel{0}} \overset{11}{\cancel{1}} \\ - 4918 \\ \hline 1983 \end{array}$$

5 Final answer

$$\begin{array}{r} \overset{5}{\cancel{5}} \overset{18}{\cancel{0}} \overset{9}{\cancel{0}} \overset{11}{\cancel{1}} \\ - 4918 \\ \hline 1983 \end{array}$$

6901 - 4918 = 1983
1983 is the difference!

INDEPENDENT PRACTICE

Solve each one. Write the answer below the line.

1.
$$\begin{array}{r} 7915 \\ - 6308 \\ \hline 1607 \end{array}$$

2.
$$\begin{array}{r} 7108 \\ - 5451 \\ \hline 1657 \end{array}$$

3.
$$\begin{array}{r} 9368 \\ - 6627 \\ \hline 2741 \end{array}$$

4.
$$\begin{array}{r} 9520 \\ - 5384 \\ \hline 4136 \end{array}$$

5.
$$\begin{array}{r} 9731 \\ - 2312 \\ \hline 7419 \end{array}$$

6.
$$\begin{array}{r} 6172 \\ - 5352 \\ \hline 820 \end{array}$$

7.
$$\begin{array}{r} 8782 \\ - 6557 \\ \hline 2225 \end{array}$$

8.
$$\begin{array}{r} 1295 \\ - 1189 \\ \hline 106 \end{array}$$

9.
$$\begin{array}{r} 3234 \\ - 2540 \\ \hline 694 \end{array}$$

10.
$$\begin{array}{r} 9072 \\ - 7953 \\ \hline 1119 \end{array}$$

11.
$$\begin{array}{r} 5719 \\ - 3262 \\ \hline 2457 \end{array}$$

12.
$$\begin{array}{r} 5040 \\ - 4291 \\ \hline 749 \end{array}$$

13.
$$\begin{array}{r} 4756 \\ - 2090 \\ \hline 2666 \end{array}$$

14.
$$\begin{array}{r} 8162 \\ - 1225 \\ \hline 6937 \end{array}$$

15.
$$\begin{array}{r} 6110 \\ - 5177 \\ \hline 933 \end{array}$$

16.
$$\begin{array}{r} 8640 \\ - 3676 \\ \hline 4964 \end{array}$$

17.
$$\begin{array}{r} 7491 \\ - 2501 \\ \hline 4990 \end{array}$$

18.
$$\begin{array}{r} 4739 \\ - 1919 \\ \hline 2820 \end{array}$$

19.
$$\begin{array}{r} 6922 \\ - 6124 \\ \hline 798 \end{array}$$

20.
$$\begin{array}{r} 9386 \\ - 2539 \\ \hline 6847 \end{array}$$

I solved by: started with the ones borrowed a ten checked my work