



Another Look at the Standard Algorithm

Let's subtract from numbers with zeros.

Warm-up

Number Talk: Differences

Find the value of each difference mentally.

- $87 - 24$
- $387 - 124$
- $6,387 - 129$
- $6,387 - 4,329$

Activity 1

A Lot of Zeros

1. Find the value of each difference.

a.

$$\begin{array}{r} 7 \ 0 \ 0 \\ - 1 \ 6 \\ \hline \end{array}$$

b.

$$\begin{array}{r} 7, \ 0 \ 0 \ 0 \\ - 1 \ 6 \\ \hline \end{array}$$

c.

$$\begin{array}{r} 7 \ 0, \ 0 \ 0 \ 0 \\ - 1 \ 6 \\ \hline \end{array}$$

d.

$$\begin{array}{r} 7 \ 0 \ 0, \ 0 \ 0 \ 0 \\ - 1 \ 6 \\ \hline \end{array}$$

2. Find the number that makes each expression true.

a.

$$\begin{array}{r} 4 \ 3 \\ + \\ \hline 2 \ 0 \ 0 \end{array}$$

b.

$$\begin{array}{r} 4 \ 3 \\ + \\ \hline 2, \ 0 \ 0 \ 0 \end{array}$$

c.

$$\begin{array}{r} 4 \ 3 \\ + \\ \hline 2 \ 0, \ 0 \ 0 \ 0 \end{array}$$

d.

$$\begin{array}{r} 4 \ 3 \\ + \\ \hline 2 \ 0 \ 0, \ 0 \ 0 \ 0 \end{array}$$

Activity 2

Ways of Finding Differences

Priya and Han find the value of $20,000 - 472$. They use 2 different methods to set up their calculations.

Priya

$$\begin{array}{r} 2\ 0,\ 0\ 0\ 0 \\ -\ 4\ 7\ 2 \\ \hline \end{array}$$

Han

$$\begin{array}{r} 4\ 7\ 2 \\ + \\ \hline 2\ 0,\ 0\ 0\ 0 \end{array}$$

1. Use both methods to find the difference of 20,000 and 472.
2. Kiran uses another method. Explain how Kiran finds the value of $20,000 - 472$.

$$472 + 8 = 480$$

$$480 + 20 = 500$$

$$500 + 500 = 1,000$$

$$1,000 + 19,000 = 20,000$$

$$19,000 + 500 + 20 + 8 = 19,528$$

3. Which method do you prefer? Or do you prefer another way? Explain your reasoning.

4. Find the value of $50,400 - 1,389$. Show your reasoning.