

Do this ONLY after you have completed the problem yourself!

Examine the following student responses to Question 1.

Which artifact demonstrates the strongest understanding of place value? Why?

Which artifact demonstrates the weakest understanding of place value? Why?

How would you address one of the misconceptions demonstrated by one of these responses?

Student response #1

Without clearing the calculator, how could she correct her mistake?

She could add 1.

Without clearing the calculator, how could she correct her mistake another way?

She could add 2 and subtract 1.

Student response #2

Without clearing the calculator, how could she correct her mistake?

She could add 100
 $8275 + 100$

Without clearing the calculator, how could she correct her mistake another way?

She could add 50 2 times

Student Response #3

Without clearing the calculator, how could she correct her mistake?

$$\begin{array}{r} 8,275 \\ + 100 \\ \hline 8,375 \end{array}$$

Without clearing the calculator, how could she correct her mistake another way?

$$\begin{array}{r} 8,375 \\ - 100 \\ \hline 8,275 \end{array}$$

Student Response #4

Without clearing the calculator, how could she correct her mistake?

subtract the number she made a mistake on, and she'll get the number 0 and it's clear,

Without clearing the calculator, how could she correct her mistake another way?

Student Response #5

Without clearing the calculator, how could she correct her mistake?

Laura could add one hundred,

Without clearing the calculator, how could she correct her mistake another way?

Laura could put on the other number that she is going to put down one hundred more

Student Response #6

Without clearing the calculator, how could she correct her mistake?

By putting plus
100,

$$\begin{array}{r} 8,275 \\ + 100 \\ \hline 8,375 \end{array}$$

Without clearing the calculator, how could she correct her mistake another way?

By putting plus 200
subtract 100

$$\begin{array}{r} 8,275 \\ + 200 \\ \hline 8,475 \\ - 100 \\ \hline 8,375 \end{array}$$