

PreAlgebra
Skill-Builder #D-6
Subtracting Decimals or Adding Decimals of Different Signs

Note: $a - b = a + (-b)$

Recall that when adding two numbers of different signs, we will **subtract** their numerical values and keep the sign of the number with the larger absolute value.

When subtracting decimals, you have to first align them by their place values, always placing the number with the larger absolute value **on top**. You can add zeros to make the decimals have the same number of decimal places. Then subtract the decimal numbers as if they are whole numbers, starting from the rightmost digits with the lowest place value and borrow if necessary. Place the decimal point in the difference just below other decimal points and drop unnecessary zeros after the last nonzero digit in the decimal part.

Example 1:

Simplify: $32.023 - 128$

Notice that the two numbers are of different signs, so we subtract their numerical values.

Remember to place the larger absolute value on top and keep the sign of the number with the larger absolute value (number on top).

$$\begin{array}{r} 1279910 \\ -1\cancel{2}\cancel{8}.\cancel{0}\cancel{0}\cancel{0} \\ + 32.023 \\ \hline -95.977 \end{array}$$

Answer: -95.977

Example 2:

Simplify: $-76.613 + 65.213$

$$\begin{array}{r} -76.613 \\ +65.213 \\ \hline -11.400 \end{array}$$

(drop unnecessary zeros after the last nonzero digit in the decimal part)

Answer: -11.4

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1. Simplify: $122.625 - 69.725$

2. Simplify: $47.953 - 74.12$

3. Simplify: $-12.78 + 9.875$

4. Simplify: $-85.045 + 109$

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Answers

1. 52.9
2. -26.167
3. -2.905
4. 23.955

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