

ADDING AND SUBTRACTING RATIONAL NUMBERS I

Mr. Erwin is reviewing how to add and subtract decimals with his students. Help Mr. Erwin by solving the problems below.

$136.95 + 52.7 =$

$987.13 - 856.22 =$

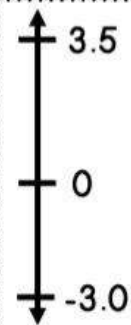
$456.77 - 89.9 =$

a. What part of the process for adding and subtracting decimals will still apply when you include positive and negative decimals?

ADDING POSITIVE AND NEGATIVE DECIMALS

- The process and algorithm applies to adding both positive and negative decimals.
 - If the signs are the same, _____ and use the same sign.
 - If the signs are _____, _____ and take the sign of the number with the greatest absolute value.

$3.5 + (-6.5)$



Practice adding decimals in the questions below.

1. $-3.7 + 4 =$ _____

2. $2.5 + (-3.3) =$ _____

3. $-2.5 + 10.7 =$ _____

4. $8.2 + (-17.6) =$ _____


5. $9.0 + (-7.4) =$ _____

Use the cards below to create an equivalent expression using the additive inverse. Then, solve the problem to determine a solution.

<div style="display: flex; flex-direction: column; gap: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> A $3.78 - 5.78$ </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> B $7.5 - 8.75$ </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> C $-8.6 - (-20.4)$ </div> <div style="border: 1px solid black; padding: 5px;"> D $-0.6 - 4.6$ </div> </div>	<div style="display: flex; flex-direction: column; gap: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> E </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> F </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> G </div> <div style="border: 1px solid black; padding: 5px;"> H </div> </div>
<p>Card A and Card H have a solution of _____.</p> <p>Card B and Card E have a solution of _____.</p> <p>Card C and Card G have a solution of _____.</p> <p>Card D and Card F have a solution of _____.</p>	

Practice applying decimals in the situations below.

6. Virgil borrowed \$800 from his grandparents to start a lawn mowing business in his neighborhood. After mowing lawns for a month and paying his expenses, he was able to pay them \$188.56. How much does Virgil still owe his grandparents?

I KNOW:	I NEED TO KNOW:
PLAN AND WORK:	SOLUTION: <div style="text-align: right; margin-top: 20px;">  </div>

7. The water level in the Colorado River is 2.55 meters below average. A large rainfall caused the water level to rise 0.8 meters. What is the water level after the rainfall?

I KNOW:	I NEED TO KNOW:
PLAN AND WORK:	SOLUTION: