

Learning Goals - Adding and Subtracting Integers Summary

For the operation “**addition**”, the order of the terms does not impact the sum.
ie. $4 + (-3) = 1$ and $(-3) + 4 = 1$

<p>Adding Values with the same sign (both positive, or both negative)</p> <p>- The answer will be the same sign as the original numbers</p> <p>$8 + 3 = 11$ (all values are positive)</p> <p>$(-9) + (-4) = -13$ (all values are negative)</p> <p>Your Examples</p> <p>(a)</p> <p>(b)</p>	<p>Adding Values with Different Signs (one positive, one negative)</p> <p>- The answer will be the sign of the larger quantity</p> <p>$8 + (-3) = 5$ (the eight is larger)</p> <p>$(-9) + 4 = -5$ (the negative nine is larger)</p> <p>Your Examples</p> <p>(a)</p> <p>(b)</p>
<p>Adding by breaking up the numbers</p> <p>$124 + 48$ $= 100 + 20 + 4 + 40 + 8$ $= 100 + 20 + 40 + 4 + 8$ $= 100 + 60 + 12$ $= 172$</p> <p>Your Example</p>	<p>Adding by using the Column method</p> $\begin{array}{r} 456 \\ +125 \\ \hline 11 \\ 70 \\ +500 \\ \hline 581 \end{array}$ <p>Your Examples</p>

Learning Goals - Adding and Subtracting Integers Summary

For the operation “subtraction”, the order of the terms **DOES** impact the sum.
 i.e. $4 - 7 = (-3)$ is **NOT** the same as $7 - 4 = 3$

<p style="text-align: center;">Subtracting Values that are POSITIVE</p> <ul style="list-style-type: none"> - Subtracting a positive value, is the same as adding a negative value <p style="margin-left: 40px;">$5 - 3$ is the same as $5 + (-3)$</p> <p style="margin-left: 40px;">$18 - 5$ is the same as $18 + (-5) = 13$</p> <p>Your Examples</p> <p style="margin-left: 40px;">(a)</p> <p style="margin-left: 40px;">(b)</p>	<p style="text-align: center;">Subtracting Values that are NEGATIVE</p> <ul style="list-style-type: none"> - Subtracting a negative value, is the same as adding a positive value <p style="margin-left: 40px;">$6 - (-3)$ is the same as $6 + 3$</p> <p style="margin-left: 40px;">$7 - (-8)$ is the same as $7 + 8 = 15$</p> <p>Your Examples</p> <p style="margin-left: 40px;">(a)</p> <p style="margin-left: 40px;">(b)</p>												
<p style="text-align: center;">Subtraction by breaking up the numbers</p> <p style="margin-left: 40px;">$124 - 48$ $= 100 + 20 + 4 - 40 - 8$ $= 100 + 20 - 40 + 4 - 8$ $= 100 - 20 - 4$ $= 76$</p> <p>Your Examples</p>	<p style="text-align: center;">Subtraction by using the Column method (you may need to borrow from the next column)</p> <div style="margin-left: 40px;"> <table style="border: none;"> <tr> <td style="text-align: right; padding-right: 20px;">456</td> <td style="text-align: right;">456</td> </tr> <tr> <td style="text-align: right;">$\underline{-125}$</td> <td style="text-align: right;">$\underline{-125}$</td> </tr> <tr> <td style="text-align: right;">1</td> <td style="text-align: right;">331</td> </tr> <tr> <td style="text-align: right;">30</td> <td></td> </tr> <tr> <td style="text-align: right;">$\underline{+300}$</td> <td></td> </tr> <tr> <td style="text-align: right;">331</td> <td></td> </tr> </table> </div> <p>Your Examples</p>	456	456	$\underline{-125}$	$\underline{-125}$	1	331	30		$\underline{+300}$		331	
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