

# Solving Addition and Subtraction Story Problems



## Objective

In this lesson, you will

Juan is driving from Detroit to Boston to visit his mother. The distance between Boston and Detroit is 702 miles. He has driven 150 miles. Juan wants to know how much farther he must drive.

Problem-Solving Steps	
1. _____ what the question is.	How much _____ must Juan drive?
2. _____ the information you know.	<ul style="list-style-type: none"> <li>• Detroit to Boston is _____ miles.</li> <li>• Juan has driven _____ miles.</li> </ul>
3. _____ a picture or chart that shows the information and the question.	
4. _____ the steps that tell how to find the answer.	The distance already traveled should be _____ added to _____ subtracted from the distance between Detroit and Boston.
5. _____ and solve the arithmetic problem for each step.	Select the correct problem for this step:  $\begin{array}{r} 702 \\ - 150 \\ \hline \end{array}$  $\begin{array}{r} 702 \\ + 150 \\ \hline \end{array}$  Solution: _____ miles
6. _____ your work.	150 miles + _____ miles = _____ miles

Ann had 21 dollars. She earned 7 more dollars baby-sitting and spent 4 dollars for 2 shirts at a garage sale. How much money did she have left?

Question:	How much money did Ann have _____?												
Information you know:	<ul style="list-style-type: none"> <li>Ann had _____ dollars.</li> <li>She earned _____ more dollars.</li> <li>She spent _____ dollars.</li> </ul>												
Picture:	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> </tr> <tr> <td style="text-align: center;"><i>has</i></td> <td style="text-align: center;"><i>earned</i></td> <td style="text-align: center;"><i>spent</i></td> <td style="text-align: center;"><i>remaining</i></td> </tr> <tr> <td style="text-align: center; border-top: 1px solid black;">21</td> <td style="text-align: center; border-top: 1px solid black;">7</td> <td style="text-align: center; border-top: 1px solid black;">4</td> <td style="text-align: center; border-top: 1px solid black;">?</td> </tr> </table>					<i>has</i>	<i>earned</i>	<i>spent</i>	<i>remaining</i>	21	7	4	?
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21	7	4	?										
Steps to solve:	<ul style="list-style-type: none"> <li><u>Add</u> <u>Subtract</u> the amount she earned to the amount she started with.</li> <li>Then <u>add</u> <u>subtract</u> amount she spent.</li> </ul>												
Solution:	$21 + 7 = \underline{\quad}$ <span style="margin-left: 200px;"><math>\underline{\quad} - 4 = \underline{\quad}</math></span>												
Check:	$\underline{\quad} + 4 = 28$ <span style="margin-left: 200px;"><math>28 - 7 = \underline{\quad}</math></span>												

Lin took 75 boxes of carrots and 80 boxes of potatoes to the market. She sold 68 boxes of carrots and 71 boxes of potatoes. How many boxes of vegetable did she take home?

Question:																	
Information you know:	<ul style="list-style-type: none"> <li>took _____ boxes of carrots and _____ boxes of potatoes</li> <li>sold _____ boxes of carrots and _____ boxes of potatoes</li> </ul>																
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<i>took</i>	□	□															
<i>sold</i>	□	□															
<i>left</i>																	

Steps to solve:	<ul style="list-style-type: none"> <li>• How many boxes of _____ are left?</li> <li>• How many boxes of _____ are left?</li> <li>• How many boxes altogether are left?</li> </ul>																
Solution:	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th><i>carrots</i></th> <th><i>potatoes</i></th> <th><i>total</i></th> </tr> </thead> <tbody> <tr> <td><i>took</i></td> <td style="text-align: center;">75</td> <td style="text-align: center;">80</td> <td></td> </tr> <tr> <td><i>sold</i></td> <td style="text-align: center;">68</td> <td style="text-align: center;">71</td> <td></td> </tr> <tr> <td><i>left</i></td> <td style="text-align: center;">□</td> <td style="text-align: center;">□</td> <td style="text-align: center;">□</td> </tr> </tbody> </table>		<i>carrots</i>	<i>potatoes</i>	<i>total</i>	<i>took</i>	75	80		<i>sold</i>	68	71		<i>left</i>	□	□	□
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Check:	155 – 139 = _____																

## Summary

In the examples above, what words clued you to use addition or subtraction?