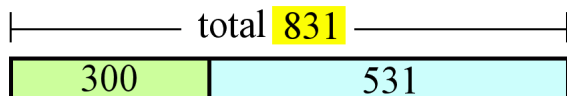


The Connection with Addition and Subtraction

In this model, two parts make a total:



The parts are 300 and 531. The total is 831.
You can think of it as a stick or a board that is 831 cm long.

From this model we can write the addition:

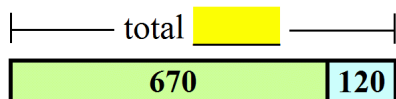
$$300 + 531 = 831$$

We can also write two subtractions:

$$831 - 300 = 531$$

$$831 - 531 = 300$$

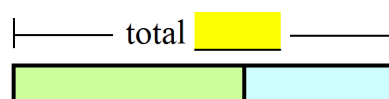
1. Write one addition and two subtraction sentences to match the model.



a. _____ + _____ = _____

_____ - _____ = _____

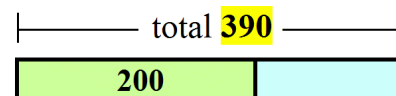
_____ - _____ = _____



b. _____ + _____ = _____

99 - 65 = _____

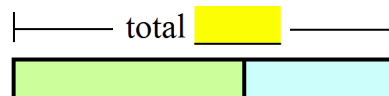
_____ - _____ = _____



c. _____ + _____ = _____

_____ - _____ = _____

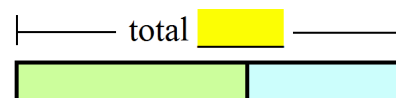
_____ - _____ = _____



d. 199 + _____ = 400

_____ - _____ = _____

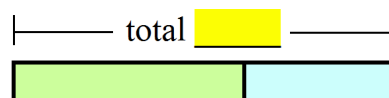
_____ - _____ = _____



e. _____ + _____ = _____

_____ - _____ = _____

95 - _____ = 28



f. _____ + _____ = _____

1,000 - _____ = 440

_____ - _____ = _____

<p>Sometimes you know the total and one part, but you don't know the other part.</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> _____ total 570 _____ </div> <div style="display: flex; justify-content: space-between; border: 1px solid black; height: 20px; margin: 0 auto;"> <div style="background-color: #90EE90; width: 30%; text-align: center; padding: 2px 10px;">200</div> <div style="background-color: #ADD8E6; width: 70%; text-align: center; padding: 2px 10px;">?</div> </div> </div>
<p>You can write a “how many more” addition:</p> <p style="text-align: center;">$200 + \underline{\quad ? \quad} = \text{570}$</p> <p style="text-align: center;">(200 and how many more makes 570?)</p>	<p>You can also write a subtraction sentence:</p> <p style="text-align: center;">$\text{570} - 200 = \underline{\quad ? \quad}$</p>
<p>The unknown part (marked with ?) is 370.</p>	

2. Fill in the missing parts so that the addition and subtraction sentences match the model.

<div style="border: 1px solid black; padding: 5px; text-align: center;"> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> _____ total 660 _____ </div> <div style="display: flex; justify-content: space-between; border: 1px solid black; height: 20px; margin: 0 auto;"> <div style="background-color: #90EE90; width: 60%; text-align: center; padding: 2px 10px;">560</div> <div style="background-color: #ADD8E6; width: 40%; text-align: center; padding: 2px 10px;"></div> </div> </div> <p>a. $560 + \underline{\hspace{2cm}} = 660$</p> <p>_____ - _____ = _____</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> _____ total _____ _____ </div> <div style="display: flex; justify-content: space-between; border: 1px solid black; height: 20px; margin: 0 auto;"> <div style="background-color: #90EE90; width: 10%; text-align: center; padding: 2px 10px;"></div> <div style="background-color: #ADD8E6; width: 90%; text-align: center; padding: 2px 10px;"></div> </div> </div> <p>b. $200 + \underline{\hspace{2cm}} = 900$</p> <p>_____ - _____ = _____</p>
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3. Draw a model to match the addition or subtraction sentence. Fill in the missing parts.

<p>a. _____ + _____ = _____</p> <p style="margin-left: 40px;">$965 - 400 = \underline{\hspace{2cm}}$</p>	<p>b. $701 + \underline{\hspace{2cm}} = 830$</p> <p>_____ - _____ = _____</p>
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4. Solve the problems. Write a “how many more” addition and a subtraction to match them.

- | | |
|--|---|
| <p>a. Ann needs 56 pins for a sewing project. She only has 41.
How many more does she need?</p> | <p>_____ + _____ = _____</p> <p>_____ - _____ = _____</p> |
| <p>b. You are on page 224 of a book that has 380 pages.
How many pages are left to read?</p> | <p>_____ + _____ = _____</p> <p>_____ - _____ = _____</p> |

The ***difference*** of two numbers means how far apart they are from each other.

How far apart are 10 and 15?

What is the difference of 20 and 40?

You can use **subtraction** to find the difference of two numbers.

What is the difference of 90 and 36?

Subtract: $90 - 36 = 54$. It is 54.

You can **add up** to find the difference of two numbers.

What is the difference of 299 and 805?

Add from 299 to 805:

$$\begin{array}{r} 299 + \underline{1} = 300. \\ 300 + \underline{500} = 800. \\ 800 + \underline{5} = 805. \end{array}$$

I added $1 + 500 + 5 = 506$. The difference is **506**.

5. Find the difference of:

a. 12 and 51

b. 200 and 650

c. 588 and 611

6. Solve the problems. If needed, add and subtract in columns using the grids below.

a. The temperature outside is 25 degrees Fahrenheit, and inside it is 74 degrees.
What is the difference in temperature?

b. Ellie has saved \$190. She wants a computer that costs \$429.
How many more dollars does she need to buy it?

c. Peter has saved \$49. He wants to buy a cell phone for \$80 and the cell phone service for \$42. How much does he still need to save?

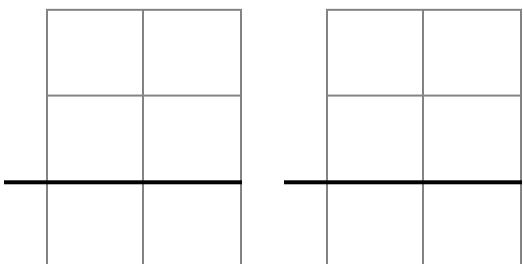
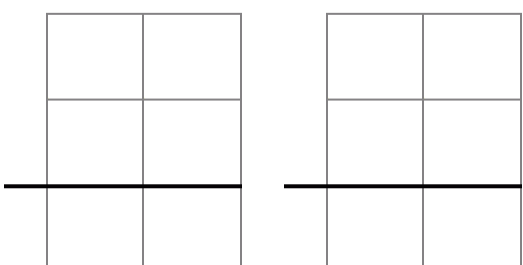
d. A cook needs 84 eggs. Eggs are sold in cartons of 30.
How many cartons does the cook need to buy?

How many eggs will be left over?

7. Below the addition, write a matching subtraction problem so that the numbers in the boxes are the same. Can you use mental math? Try adding up!

<p>a. $199 + \boxed{} = 234$</p> <p>$\underline{} - \underline{} = \boxed{}$</p>	<p>b. $17 + \boxed{} = 85$</p> <p>$\underline{} - \underline{} = \boxed{}$</p>
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8. Solve the problems.

<p>a. Jack had 83 tennis balls and Robert had 45. Then Jack lost 11 of his. How many more tennis balls does Jack have now than Robert?</p>	
<p>b. A diving suit costs \$66. John has saved \$37, and his grandma gave him \$15 more. How much more money does he still need before he can buy it?</p>	

9. Here *three* parts make up a whole. Solve for the part that is marked with ?

<p>a. $\overbrace{\boxed{560} \boxed{100} \boxed{?}}^{\text{total } 960}$</p>	<p>b. $\overbrace{\boxed{20} \boxed{40} \boxed{?}}^{\text{total } 130}$</p>
<p>c. $\overbrace{\boxed{?} \boxed{28} \boxed{20}}^{\text{total } 99}$</p>	<p>d. $\overbrace{\boxed{222} \boxed{?} \boxed{400}}^{\text{total } 822}$</p>