Strategies for Solving Addition Problems (page 1 of 5)

There are different ways to solve addition problems.

Adding by Place

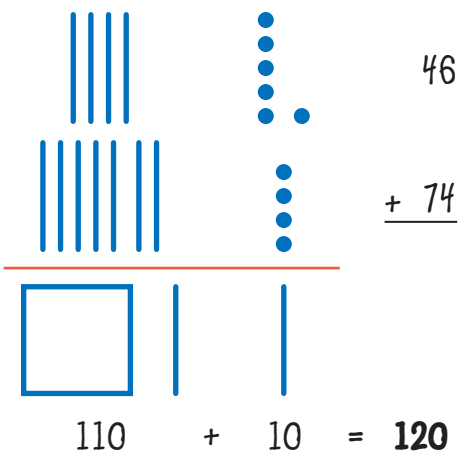
Gina used adding by place to solve this problem.

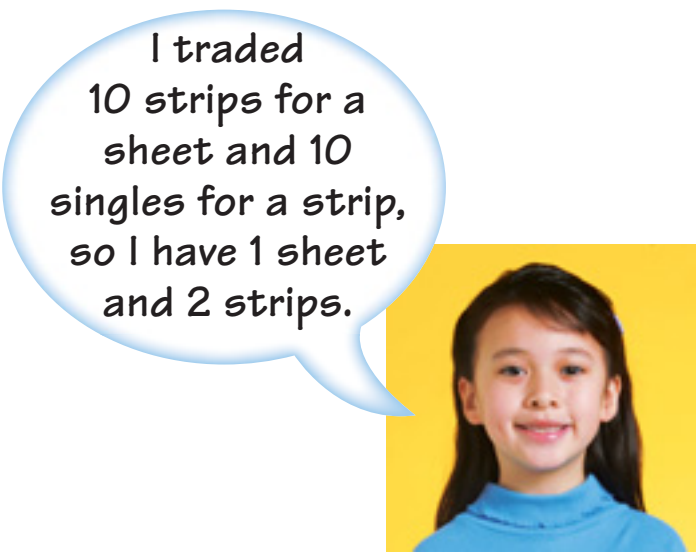
Bridget went to Sticker Station and bought 46 horse stickers and 74 space stickers. How many stickers did she buy altogether?

Gina's Solution

First I added the tens.	40 + 70 = 110
Then, I added the ones.	6 + 4 = 10
Then, I put the tens and ones together.	110 + 10 = **120**

Gina's solution can also be shown using sticker sketches.





Strategies for Solving Addition Problems (page 2 of 5)

Ines and Philip used adding by place when they solved this problem.

$$\begin{array}{r} 258 \\ +\,392 \\ \hline \end{array}$$

They added the hundreds together, the tens together, and the ones together. Their solutions are similar, but they recorded their work differently.

Ines's Solution

200 + 300 = 500

50 + 90 = 140

8 + 2 = 10

500 + 140 + 10 = **650**

Philip's Solution

$$\begin{array}{r} 258 \\ +\,392 \\ \hline 500 \\ 140 \\ +\ 10 \\ \hline \mathbf{650} \end{array}$$

Ines recorded her solution sideways and Philip recorded his up and down.

How would you solve these problems?

37 + 86

$$\begin{array}{r} 463 \\ +\ 279 \\ \hline \end{array}$$

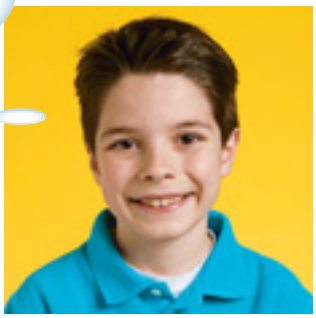
Strategies for Solving Addition Problems (page 3 of 5)

Adding One Number in Parts

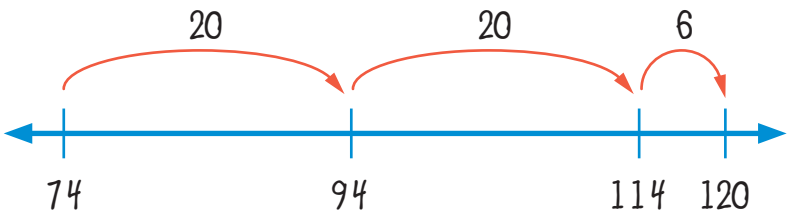
Bridget went to Sticker Station and bought 46 horse stickers and 74 space stickers. How many stickers did she buy altogether?

Edwin solved the problem by starting at 74 on the number line and adding 46 in parts.

46 = 20 + 20 + 6



Edwin's Solution



First I added on the 40 from 46 in jumps of 20.

74 + 20 = 94
94 + 20 = 114

Then I added the 6.

114 + 6 = **120**

Is there another way you could solve this problem by adding one number in parts?

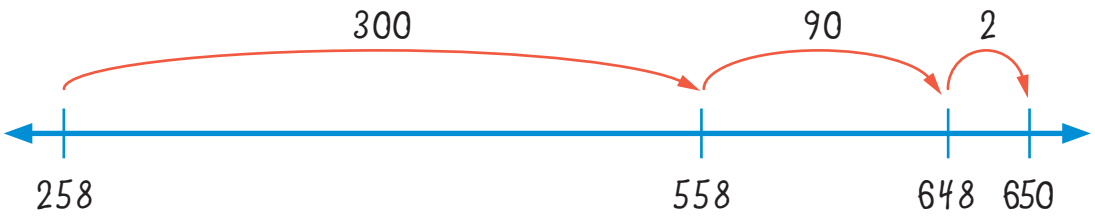
Strategies for Solving Addition Problems (page 4 of 5)

258
+ 392

Kenji solved this problem by starting at 258 and adding 392 in parts.

Kenji's Solution

$$392 = 300 + 90 + 2$$

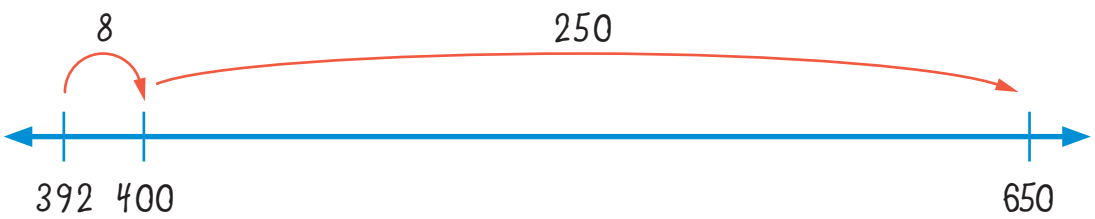


First I added the 300. 258 + 300 = 558
Then I added the 90. 558 + 90 = 648
Then I added the 2. 648 + 2 = **650**

Benjamin solved this problem by starting at 392 and adding 258 in parts.

Benjamin's Solution

$$258 = 8 + 250$$



First I added 8. 392 + 8 = 400
Then I added 250. 400 + 250 = **650**

Strategies for Solving Addition Problems (page 5 of 5)

Changing the Numbers

Bridget went to Sticker Station and bought 46 horse stickers and 74 space stickers. How many stickers did she buy altogether?

Kathryn solved this problem by changing one number.

Kathryn's Solution

I added 4 to 46 to make 50. 50 is a "landmark" number, so it's easier for me to work with.

$$\begin{array}{r} 74 \\ +\ 50 \\ \hline 124 \\ -\ \ 4 \\ \hline \mathbf{120} \end{array}$$

I added 50 instead of 46.

Then I subtracted the extra 4.