Subtraction Strategies (page 1 of 4)

In Grade 5, you are using different strategies to solve subtraction problems efficiently.

$$\begin{array}{r} 3{,}726 \\ -\ 1{,}584 \\ \hline \end{array}$$

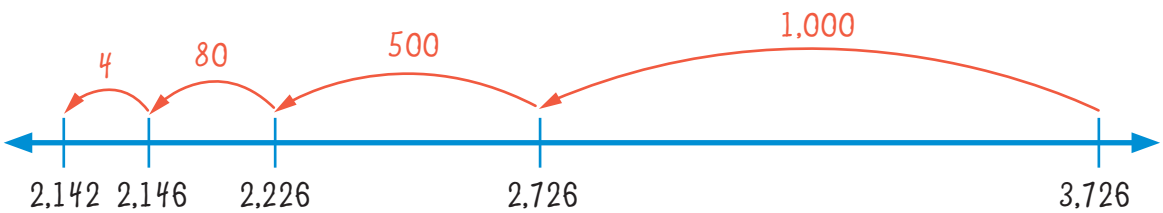
Subtracting in Parts

Tamira solved this problem by subtracting 1,584 in parts.

Tamira's solution

$$\begin{array}{r} 3{,}726 \\ -\ 1{,}000 \\ \hline 2{,}726 \\ -\ \ 500 \\ \hline 2{,}226 \\ -\ \ \ 80 \\ \hline 2{,}146 \\ -\ \ \ \ 4 \\ \hline \mathbf{2{,}142} \end{array}$$

3,726 – 1,584 = **2,142**



Subtraction Strategies (page 2 of 4)

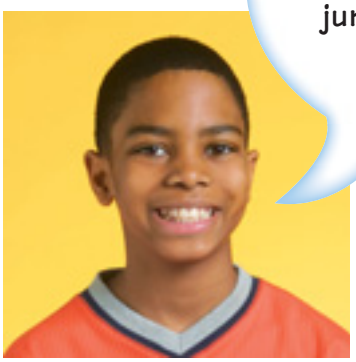
3,726
– 1,584

Adding Up

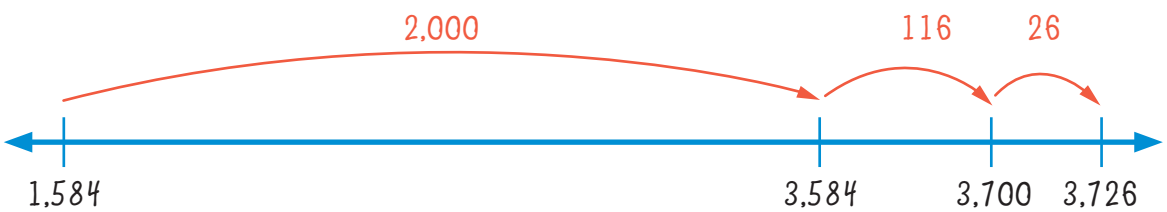
Felix added up from 1,584.

Felix's solution

1,584 + _____ = 3,726
1,584 + 2,000 = 3,584
3,584 + 116 = 3,700
3,700 + 26 = 3,726
2,142



The answer is the total of all the jumps from 1,584 up to 3,726.

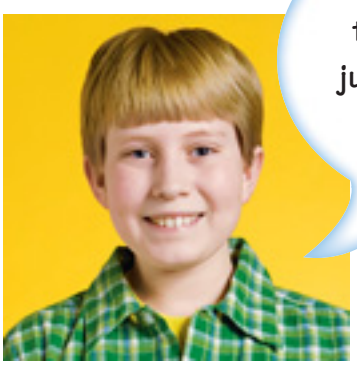


Subtracting Back

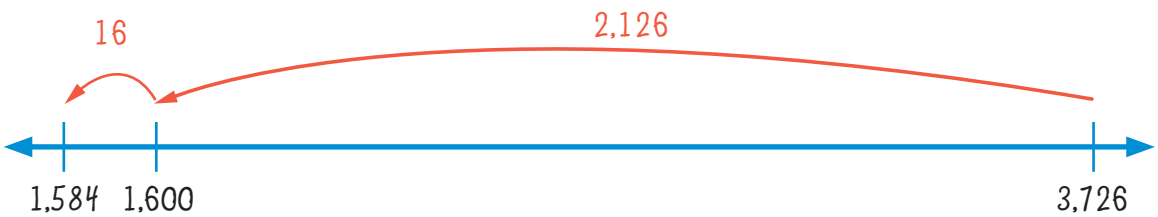
Walter used a subtracting back strategy.

Walter's solution

3,726 – 1,584 = _____
3,726 – 2,126 = 1,600
1,600 – 16 = 1,584
2,142



The answer is the total of the two jumps from 3,726 back to 1,584.



Subtraction Strategies (page 3 of 4)

$$\begin{array}{r} 3{,}726 \\ -\ 1{,}584 \\ \hline \end{array}$$

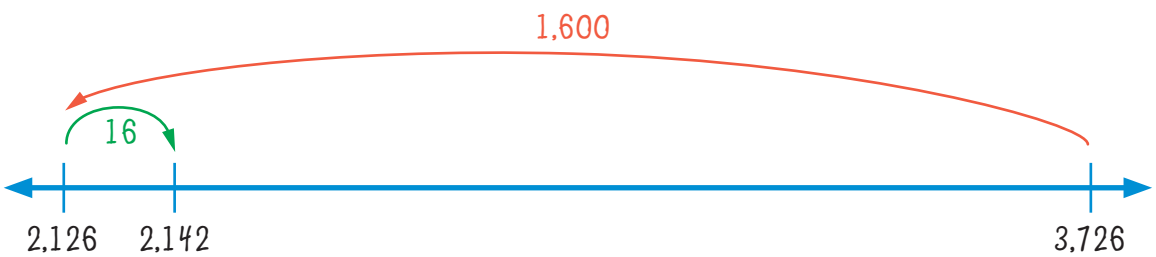
Changing the Numbers

Hana solved the problem by changing one number and adjusting the answer.

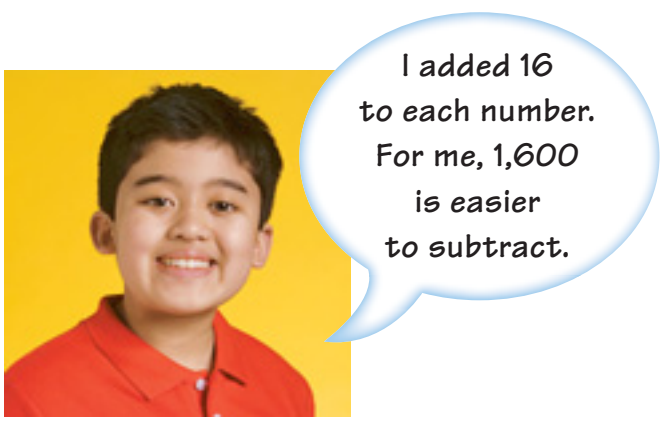
Hana's solution

3,726 − 1,600 = 2,126

2,126 + 16 = **2,142**



Joshua solved the problem by creating an equivalent problem.

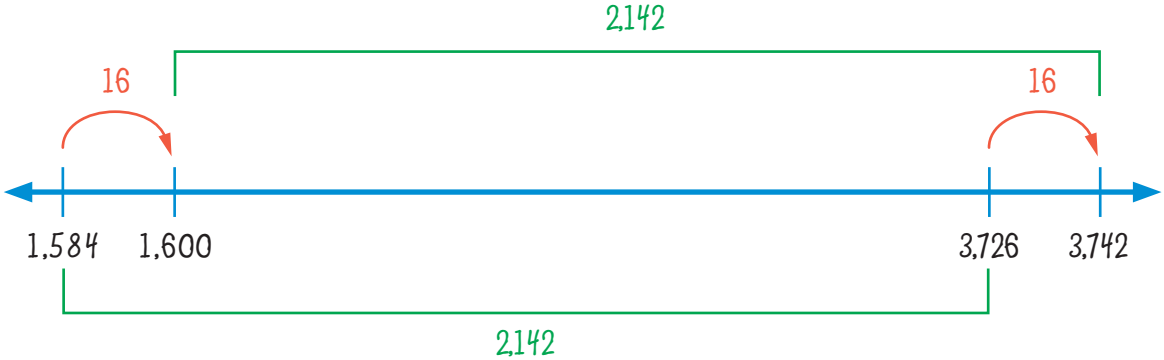


Joshua's solution

3,726 − 1,584 =

(+16) (+16)

3,742 − 1,600 = **2,142**



Subtraction Strategies (page 4 of 4)

$$\begin{array}{r} 3{,}726 \\ -\ 1{,}584 \\ \hline \end{array}$$

Subtracting by Place

Yumiko subtracted by place. She combined positive and negative results to find her answer.

Yumiko's solution

$$\begin{array}{r} 3{,}726 \\ -\ 1{,}584 \\ \hline 2 \\ -\ 60 \\ 200 \\ 2{,}000 \\ \hline \mathbf{2{,}142} \end{array}$$

This notation shows each step in Yumiko's solution.

$$\begin{array}{rrrrrrrrr} & 3{,}000 & + & 700 & + & 20 & + & 6 & \\ -\ (& 1{,}000 & + & 500 & + & 80 & + & 4 &) \\ \hline & 2{,}000 & + & 200 & + & -60 & + & 2 & = \mathbf{2{,}142} \end{array}$$

Avery subtracted by place, using the U.S. algorithm.

Avery's solution

$$\begin{array}{r} 3{,}\overset{6}{\not{7}}\overset{11}{\not{1}}26 \\ -\ 1{,}584 \\ \hline \mathbf{2{,}142} \end{array}$$

This notation shows each step in Avery's solution.

$$\begin{array}{rrrrrrrrr} & & & \overset{600}{\not{7}\not{0}\not{0}} & & \overset{100}{20} & + & 6 & \\ & 3{,}000 & + & & + & & & & \\ -\ (& 1{,}000 & + & 500 & + & 80 & + & 4 &) \\ \hline & 2{,}000 & + & 100 & + & 40 & + & 2 & = \mathbf{2{,}142} \end{array}$$

How would you solve the problem 3,726 – 1,584?