

# Stage 6

## Addition & Subtraction Pamphlet

### Stage 6

Addition & Subtraction Strategies

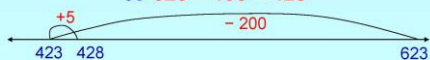


#### Using compensation from tidy numbers

$$623 - 195 = \square$$

Create a tidy number  $623 - 200 = 423$   
 Now compensate  $423 + 5 = 428$

so  $623 - 195 = 428$



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#### Using place value

$$456 + 247 = \square$$

Expand the numbers into 100s, 10s & 1s  
 $400 + 200 + 50 + 40 + 6 + 7$   
 Now recombine the numbers  
 $600 + 90 + 13 \rightarrow 600 + 103 \rightarrow 703$   
 so  $456 + 247 = 703$

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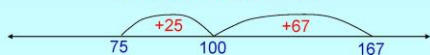


#### Using compatible numbers

$$75 + 67 + 25 = \square$$

Rearrange to put the compatibles together  
 $75 + 25 + 67 = \square$   
 Add the compatibles together first  
 $75 + 25 = 100 \rightarrow 100 + 67 \rightarrow 167$

so  $75 + 67 + 25 = 167$



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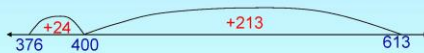
#### Using reversibility

$$613 - 376 = \square$$

Write the equation as ...  
 $376 + \square = 613$

$$24 + 213 = 237$$

so  $613 - 376 = 237$



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#### Using equal additions

$$652 - 137 = \square$$

Add the same number to both numbers

$$652 + 3 - 137 + 3 = \square$$

$$655 - 140 = 515$$

so  $652 - 137 = 515$



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#### Using decomposition

$$852 - 438 = \square$$

Write the numbers in columns, then expand both numbers

$$\begin{array}{r} 852 \\ - 438 \\ \hline \end{array} \quad \begin{array}{r} 800 + 50 + 2 \\ - 400 + 30 + 8 \\ \hline \end{array}$$

Rename or use negative numbers

$$\begin{array}{r} 800 + 50 + 2 \\ - 400 + 30 + 8 \\ \hline 400 + 10 + 4 \end{array} \quad \begin{array}{r} 800 + 50 + 2 \\ - 400 + 30 + 8 \\ \hline 400 + 20 - 6 \end{array}$$

so  $852 - 438 = 414$