

# Stage 7

## Addition & Subtraction Pamphlet

**Stage 7**  
Addition & Subtraction Strategies

**Using compensation from tidy numbers**

$4.2 + 1.95 = \square$

Create a tidy number  $4.2 + 2 = 6.2$  (1.95 + 0.05)  
Now compensate  $6.2 - 0.05 = 6.15$

so  $4.2 + 1.95 = 6.15$

**Stage 7**  
Addition & Subtraction Strategies

**Using place value**

$8.64 - 4.5 = \square$

Expand the numbers into  $\frac{1}{10}$ s,  $\frac{1}{100}$ s &  $\frac{1}{1000}$ s  
 $(8 - 4) + (0.6 - 0.5) + 0.04$   
Now recombine the numbers

so  $8.64 - 4.5 = 4.14$

**Stage 7**  
Addition & Subtraction Strategies

**Using negatives**

$12.3 - 7.7 = \square$

Write as ...  
 $(12 - 7) + (0.3 - 0.7) =$   
 $5 + -0.4 = 4.6$

so  $12.3 - 7.7 = 4.6$

**Stage 7**  
Addition & Subtraction Strategies

**Using reversibility & commutativity**

$7.08 - 4.17 = \square$

Write the equation as ...  
 $4.17 + \square = 7.08$  (Reversibility)  
 $\square + 4.17 = 7.08 \rightarrow 4.17 + \square = 7.08$  (Commutativity)

$0.03 + 0.08 + 2.8 \rightarrow 0.11 + 2.8 \rightarrow 2.91$

so  $7.08 - 4.17 = 2.91$

**Stage 7**  
Addition & Subtraction Strategies

**Using equal additions**

$6.64 - 3.8 = \square$

Add the same amount to both numbers

$6.64 - 3.8 = \square$  +0.2 +0.2  
 $6.84 - 4 = \square \rightarrow 2.84$

so  $6.64 - 3.8 = 2.84$

**Stage 7**  
Addition & Subtraction Strategies

**Using decomposition**

Write the numbers in columns, then expand both numbers

8.3	4	8 + 0.3 + 0.04
- 6.7	2	- 6 + 0.7 + 0.02

Rename or use negative numbers to solve the equation

<del>7</del> 8 + <del>1</del> 0.3 + 0.04	8	+ 0.3 + 0.04
- 6 + 0.7 + 0.02	-6	+ 0.7 + 0.02
+ 1 + 0.6 + 0.02	2	- 0.4 + 0.02

so  $8.34 - 6.72 = 1.62$