

Mental strategies for addition and subtraction

1 a) Tick the calculations that are equivalent to $46 + 99$

$40 + 90 + 6 + 9$ $45 + 100$ $46 + 90 + 9$

$99 + 6 + 40$ $46 + 100 - 1$ $99 + 40 + 6$

b) What method would you use to work out $46 + 99$ in your head?
Discuss with a partner.

2 Look at Scott's method for working out $364 + 297$

$ \begin{array}{r} 364 + 297 \\ - 3 \quad + 3 \\ \hline 361 + 300 \\ \hline 661 \end{array} $
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Discuss with a partner why Scott's method works.

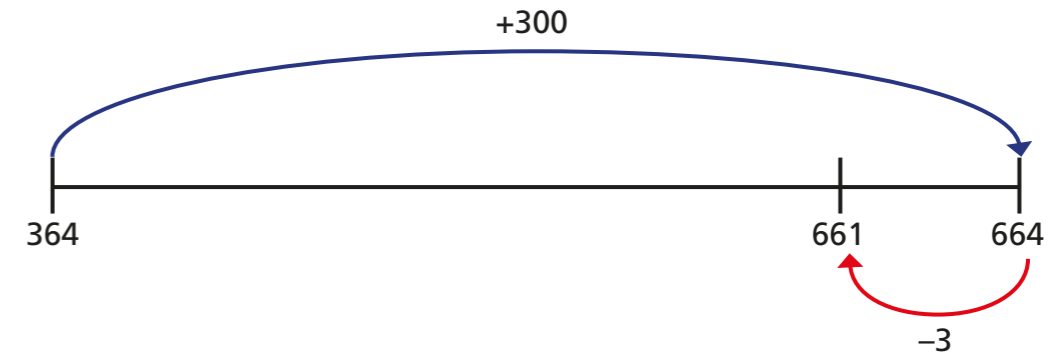
Use Scott's method to work out these calculations. Show your method.

a) $98 + 28 =$ d) $195 + 237 =$

b) $692 + 299 =$ e) $567 + 294 =$

c) $712 + 995 =$ f) $3,756 + 1,997 =$

3 The number line shows a different way to work out $364 + 297$



Use a number line to work out these additions.

a) $645 + 99 =$



b) $317 + 298 =$



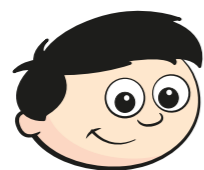
c) $194 + 458 =$



d) $3,516 + 2,995 =$



4



I can work out $803 - 99$ by doing $803 - 100 - 1$

Draw a diagram to show the mistake that Dexter has made.

Talk about your answers with a partner.

5

Look at Dora's method for working out $180 - 57$

$$180 - 50 = 130$$

$$130 - 7 = 123$$

Use Dora's method to work out these calculations. Show your method.

a) $180 - 42 =$

$180 - 58 =$

$180 - 131 =$

b) $360 - 35 =$

$360 - 147 =$

$360 - 228 =$

c) Why are 180 and 360 useful numbers to practise subtracting from?



6

a) Circle the calculations that are equivalent to $17.3 + 9.9$

$17.3 + 9 + 0.9$

$17.3 + 10 - 0.1$

$17.2 + 10$

b) Which method would you use to work out $17.3 + 9.9$ in your head? Explain why.

7

Match each calculation on the left to a calculation on the right.

$18.6 + 9.9$

$18.6 - 10 + 0.1$

$18.7 + 9.9$

$18.5 + 10$

$18.6 - 9.9$

$18.8 - 10$

$18.7 - 9.9$

$18.7 + 10 - 0.1$

8

Amir and Rosie are comparing methods to subtract 0.26 from 1

Amir's method

$$1 - 0.2 = 0.8$$
$$0.8 - 0.06 = 0.74$$
$$1 - 0.26 = 0.74$$

Rosie's method

$$0.26 + 0.04 = 0.3$$
$$0.3 + 0.7 = 1$$
$$0.7 + 0.04 = 0.74$$
$$1 - 0.26 = 0.74$$

Use your preferred method to complete the calculations.

a) $1 - 0.17 =$

d) $86.3 - 0.99 =$

b) $1,000 - 213 =$

e) $86.3 - 9.9 =$

c) $5 - 2.38 =$

f) $100 - 9.9 =$

