1) Explain how you could use mental methods in order to solve these calculations in the most efficient way.


2) Look carefully at the order of these calculations.

Show how they can be changed around to make the calculation easier to solve mentally:

3) Use your estimating skills and mental methods to quickly decide if each person has enough money to buy the items they want from a shop.
a) I have $£ 40$. Can I buy the things I want costing $£ 7.99$, $£ 29.99, £ 1.49$ and $£ 1.99$ ?
b) I have $£ 50$. Can I buy the things I want costing $£ 2.99, £ 4.49, £ 39.49$ and $£ 1.99$ ?

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4) Which method do you think is the most efficient to solve this calculation?


## Isabella

I think that the best way to do this calculation is by using a written method of multiplication.
I used a written method of multiplication to work out $4 \times 75=300$.

I am now going to calculate $300 \times 25$.

## Grace

I have a quick and efficient method to use. I will just add the 25 and the 75 to make 100. I will then calculate $4 \times 100$.


## Sami

I am going to rearrange the order of the calculation so that I can use mental methods.
$4 \times 25=100$
I can now solve $75 \times 100$ mentally.
2) Explain the most efficient way to carry out the calculation below using mental methods.

$$
1149+2151+2299
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1) When a number from column $A$ is added to or subtracted from a number in column $B$, the answer can be found in column $C$.


All the answers to these calculations can be found using mental methods of addition and subtraction. Show which numbers match to make a complete calculation.

| A | B | C |
| :---: | :---: | :---: |
| 1500 | 1800 | 2998 |
| 999 | 1999 | 3300 |
| 2001 | 3001 | 2002 |
| 1549 | 3550 | 4000 |
| 2199 | 1499 | 2001 |
| 1499 | 3000 | 801 |

2) Create your own calculation with an answer between 1000 and 5000 that can be worked out using mental methods of addition, subtraction, multiplication or division.

Your calculations should use strategies, such as near doubles, compensation and rearranging the order of a calculation.

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