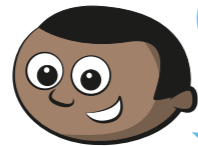


# Mental calculations

1 Mo is working out  $57 + 35$  in his head.

I added the tens:  
 $50 + 30$



I then added the ones:  
 $5 + 7$

I then added my answers together.

a) Use Mo's method to work out  $57 + 35$  in your head.

92

b) Eva started by adding 57 and 30

What do you think Eva did next?

Add 5 to her total.

c) Work out the additions in your head. Write your answers.

$25 + 48 = 73$

$250 + 480 = 730$

$62 + 55 = 117$

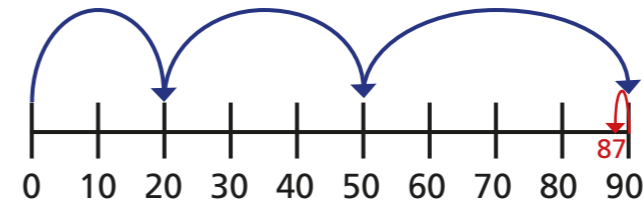
$620 + 550 = 1,170$

$260 + 250 + 240 = 750$

2 Whitney and Amir are working out  $19 + 29 + 39$

Talk about each method, and explore how they work.

Whitney's method



Amir's method

		1	9	
		2	9	
	+	3	9	
		8	7	
		2		

Which method do you think is most efficient? Why?

Various answers.

3 Use Whitney or Amir's method to solve the problems.

a)  $49p + 79p = £1.28$

b)  $99 \text{ cm} \times 5 = 495 \text{ cm}$

c)  $£10 - £5.99 = £4.01$

d)  $2 \text{ l} - 199 \text{ ml} - 399 \text{ ml} = 1,402 \text{ ml}$

4 a) Explain how you could work out this subtraction in your head.

$750 - 230$

E.g.  $750 - 200 = 550$

$550 - 30 = 520$

so  $750 - 230 = 520$

b) Explain how you could work out this subtraction in your head.

$$750 - 280$$

E.g.  $750 - 300 = 450$

$$450 + 20 = 470$$

so  $750 - 280 = 470$

c) Work out the subtractions in your head. Write your answers.

$$89 - 35 = \boxed{54}$$

$$890 - 350 = \boxed{540}$$

$$80 - 25 = \boxed{55}$$

$$800 - 250 = \boxed{550}$$

$$82 - 45 = \boxed{37}$$

$$820 - 450 = \boxed{370}$$

5

### Cars for sale: price list

Car A £2,750

Car B £19,500

Car C £24,999

Car D £45,000

a) What is the total price of all 4 cars?

£92,249

b) What is the difference between the most expensive and the least expensive cars?

£42,250

6

Work out the following multiplications in your head.

Write your answers.

$$\text{a) } 10 \times 8 = \boxed{80}$$

$$\text{c) } 18 \times 5 = \boxed{90}$$

$$20 \times 8 = \boxed{160}$$

$$34 \times 5 = \boxed{170}$$

$$40 \times 8 = \boxed{320}$$

$$5 \times 430 = \boxed{2,150}$$

$$\text{b) } 18 \times 10 = \boxed{180}$$

$$\text{d) } 21 \times 6 = \boxed{126}$$

$$18 \times 20 = \boxed{360}$$

$$7 \times 32 = \boxed{224}$$

$$18 \times 200 = \boxed{3,600}$$

$$\boxed{336} = 84 \times 4$$

Did you use the same method as your partner?

7

Choose the best method to solve each calculation.

Show your workings.

$$\text{a) } 2 \times 19 \times 5 = \boxed{190}$$

$$\text{b) } 4 \times 23 \times 5 = \boxed{460}$$

$$\text{c) } 25 \times 9 \times 3 \times 4 = \boxed{2,700}$$

$$\text{d) } 10 \times 250 \times 1.7 \times 8 = \boxed{34,000}$$