

Use formal methods for addition of decimals

1 Tick the calculations that are correct.

$0.3 + 0.4 = 0.7$

$0.5 + 0.5 = 1.0$

$0.8 + 0.3 = 0.11$

$1.3 + 1.7 = 2.10$

$0.6 + 0.8 = 1.4$

$0.3 + 0.4 + 0.5 = 0.12$

2 Complete the calculations.

a)

		5	.	6		
		+	3	.	2	
				8	.	8

c)

		5	.	6		
		+	3	.	8	
				9	.	4

b)

		5	.	6		
		+	3	.	4	
				9	.	0

d)

		2	3	.	7		
		+	4	6	.	8	
				7	0	.	5

3 Tick the calculations that are correct.

$0.03 + 0.04 = 0.07$

$0.51 + 0.5 = 0.56$

$0.99 + 0.01 = 1$

$0.99 + 0.1 = 0.109$

$0.99 + 0.1 = 1.09$

$0.2 + 0.3 + 0.41 = 0.91$

4 Complete the calculations.

a)

		5	.	0	4		
		+	3	.	7	2	
				8	.	7	6

c)

		5	3	.	7	5		
		+	2	6	.	3	6	
				8	0	.	1	1

b)

		2	.	8	6		
		+	3	.	1	8	
				6	.	0	4

d)

		1	2	.	3	6		
		+		7	.	6	4	
				2	0	.	0	0

5 Which column additions could you use to calculate $4.5 + 7$?
Tick your answers.

		4	.	5
		+	7	.
				.

		4	.	5
		+	.	7
				.

		4	.	5	
		+	7	.	0
				.	

Discuss your answers with a partner.

6 Use the column method to work out the calculations.

a) $38.6 + 11.3$

$$\begin{array}{r} 38.6 \\ + 11.3 \\ \hline 49.9 \end{array}$$

c) $64.2 + 28$

$$\begin{array}{r} 64.2 \\ + 28.0 \\ \hline 92.2 \\ 1 \end{array}$$

e) $37.6 + 1.08$

$$\begin{array}{r} 37.60 \\ + 1.08 \\ \hline 38.68 \end{array}$$

b) $38.6 + 14.8$

$$\begin{array}{r} 38.6 \\ + 14.8 \\ \hline 53.4 \\ 1 \end{array}$$

d) $23.66 + 51.3$

$$\begin{array}{r} 23.66 \\ + 51.30 \\ \hline 74.96 \end{array}$$

f) $27.3 + 5.2$

$$\begin{array}{r} 27.3 \\ + 5.2 \\ \hline 32.5 \\ 1 \end{array}$$

7

$w = 7.4$

$x = 1.84$

$y = 37$

$z = 4.02$

Work out the values of the expressions.

a) $w + x = 9.24$

c) $x + y = 38.84$

e) $w + x + z = 13.26$

b) $y + w = 44.4$

d) $z + y = 41.02$

f) $w + x + y + z = 50.26$

8

This is part of a menu in a cafe.

sandwich	£3.49
soup	£4
tea	£1.59
coffee	£1.79
cake	£2.50



Find the total cost of:

- tea and sandwich

$£5.08$

- coffee and cake

$£4.29$

- soup, tea and coffee

$£7.38$

- sandwich, cake and coffee

$£7.78$

9

Complete the calculations.

a) $1.67 + \frac{1}{4} = 1.92$

c) $1.67 + \frac{4}{5} = 2.47$

b) $1.67 + \frac{3}{4} = 2.42$

d) $1.67 + 1\frac{27}{100} = 2.94$