

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)

$$\begin{array}{r} 5 \cdot 6 \\ + 3 \cdot 2 \\ \hline 8 \cdot 8 \end{array}$$

c)

$$\begin{array}{r} 5 \cdot 6 \\ + 3 \cdot 8 \\ \hline 9 \cdot 4 \end{array}$$

b)

$$\begin{array}{r} 5 \cdot 6 \\ + 3 \cdot 4 \\ \hline 9 \cdot 0 \end{array}$$

d)

$$\begin{array}{r} 2 \ 3 \cdot 7 \\ + 4 \ 6 \cdot 8 \\ \hline 7 \ 0 \cdot 5 \end{array}$$

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)

$$\begin{array}{r} 5 \cdot 0 \ 4 \\ + 3 \cdot 7 \ 2 \\ \hline 8 \cdot 7 \ 6 \end{array}$$

c)

$$\begin{array}{r} 5 \ 3 \cdot 7 \ 5 \\ + 2 \ 6 \cdot 3 \ 6 \\ \hline 8 \ 0 \cdot 1 \ 1 \\ 1 \ 1 \cdot 1 \end{array}$$

b)

$$\begin{array}{r} 2 \cdot 8 \ 6 \\ + 3 \cdot 1 \ 8 \\ \hline 6 \cdot 0 \ 4 \\ 1 \ 1 \end{array}$$

d)

$$\begin{array}{r} 1 \ 2 \cdot 3 \ 6 \\ + 7 \cdot 6 \ 4 \\ \hline 2 \ 0 \cdot 0 \ 0 \\ 1 \ 1 \ 1 \end{array}$$

5 Which column additions could you use to calculate $4.5 + 7$?

Tick your answers.

$$\begin{array}{r} 4 \cdot 5 \\ + 7 \cdot \\ \hline \end{array}$$

$$\begin{array}{r} 4 \cdot 5 \\ + \cdot 7 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \cdot 5 \\ + 7 \cdot 0 \\ \hline \end{array}$$

Discuss your answers with a partner.



6 Use the column method to work out the calculations.

a) $38.6 + 11.3$

3	8	.	6
+	1	1	.
<u>4</u> 9.9			

c) $64.2 + 28$

6	4	.	2
+	2	8	.
<u>9</u> 2.2			

e) $37.6 + 1.08$

3	7	.	6	0
+	1	.	0	8
<u>3</u> 8.68				

b) $38.6 + 14.8$

3	8	.	6
+	1	4	.
<u>5</u> 3.4			

d) $23.66 + 51.3$

2	3	.	6	6	
+	5	1	.	3	0
<u>7</u> 4.96					

f) $27.3 + 5.2$

2	7	.	3
+	5	.	2
<u>3</u> 2.5			

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

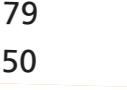
e) $w + x + z =$ 13.26

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