Use formal methods for addition of decimals

1 Tick the calculations that are correct.
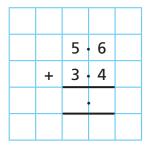
0.3 + 0.4 = 0.7 ☐   0.5 + 0.5 = 1.0 ☐   0.8 + 0.3 = 0.11 ☐

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
_____.___
```

b)

```
    5 . 6
+   3 . 4
_____.___
```

c)

```
    5 . 6
+   3 . 8
_____.___
```

d)

```
  2 3 . 7
+ 4 6 . 8
_____.___
```

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
_____._____
```

c)

```
  5 3 . 7 5
+ 2 6 . 3 6
_____._____
```

b)

```
    2 . 8 6
+   3 . 1 8
_____._____
```

d)

```
  1 2 . 3 6
+    7 . 6 4
_____._____
```

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

```
    4 . 5
+   7 .
_____.___
```
☐

```
    4 . 5
+     . 7
_____.___
```
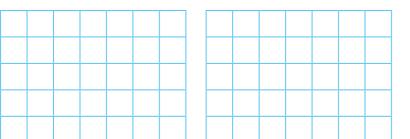☐

```
    4 . 5
+   7 . 0
_____.___
```
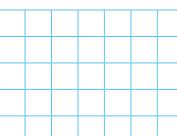☐

Discuss your answers with a partner.

6 Use the column method to work out the calculations.

a) 38.6 + 11.3

c) 64.2 + 28

e) 37.6 + 1.08
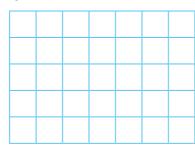
b) 38.6 + 14.8

d) 23.66 + 51.3

f) 27.3 + 5.2

7

| $w = 7.4$ | $x = 1.84$ | $y = 37$ | $z = 4.02$ |

Work out the values of the expressions.

a) $w + x =$ ☐

c) $x + y =$ ☐

e) $w + x + z =$ ☐

b) $y + w =$ ☐

d) $z + y =$ ☐

f) $w + x + y + z =$ ☐

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 ☐

• coffee and cake ☐

• soup, tea and coffee ☐

• sandwich, cake and coffee ☐

9 Complete the calculations.

a) $1.67 + \frac{1}{4} =$ ☐

c) $1.67 + \frac{4}{5} =$ ☐

b) $1.67 + \frac{3}{4} =$ ☐

d) $1.67 + 1\frac{27}{100} =$ ☐