

# Adding decimals with the same number of decimal places



1 Complete the additions.

Use the place value charts to help you.

a)  $4.45 + 3.21 = 7.66$

| Ones  | Tenths      | Hundredths     |
|-------|-------------|----------------|
| 1 1 1 | 0.1 0.1 0.1 | 0.01 0.01 0.01 |
| 1     | 0.1         | 0.01 0.01      |
| 1 1 1 | 0.1 0.1     | 0.01           |

|  |  |   |   |          |   |          |          |
|--|--|---|---|----------|---|----------|----------|
|  |  |   |   |          |   |          |          |
|  |  | 4 | • | 4        | 5 |          |          |
|  |  | + |   | 3        | • | 2        | 1        |
|  |  |   |   | <u>7</u> | • | <u>6</u> | <u>6</u> |
|  |  |   |   |          |   |          |          |

b)  $4.45 + 3.61 = 8.06$

| Ones | Tenths  | Hundredths |
|------|---------|------------|
| 0 0  | 0 0     | 0 0 0      |
| 0 0  | 0 0 0 0 | 0          |

|  |  |   |   |          |   |          |          |
|--|--|---|---|----------|---|----------|----------|
|  |  |   |   |          |   |          |          |
|  |  | 4 | • | 4        | 5 |          |          |
|  |  | + |   | 3        | • | 6        | 1        |
|  |  |   |   | <u>8</u> | • | <u>0</u> | <u>6</u> |
|  |  |   |   | 1        |   |          |          |

c)  $4.45 + 3.78 = 8.23$

| Ones | Tenths  | Hundredths |
|------|---------|------------|
| 0 0  | 0 0     | 0 0 0      |
| 0 0  | 0 0 0 0 | 0 0 0 0    |

|  |  |   |   |          |   |          |          |
|--|--|---|---|----------|---|----------|----------|
|  |  |   |   |          |   |          |          |
|  |  | 4 | • | 4        | 5 |          |          |
|  |  | + |   | 3        | • | 7        | 8        |
|  |  |   |   | <u>8</u> | • | <u>2</u> | <u>3</u> |
|  |  |   |   | 1        |   | 1        |          |

Which calculation was easier? Talk about it with a partner.

2 Use the column method to work out the additions.

|  |  |   |   |          |   |          |
|--|--|---|---|----------|---|----------|
|  |  |   |   |          |   |          |
|  |  | 5 | • | 3        |   |          |
|  |  | + |   | 2        | • | 5        |
|  |  |   |   | <u>7</u> | • | <u>8</u> |
|  |  |   |   |          |   |          |

|  |  |   |   |          |   |          |          |          |
|--|--|---|---|----------|---|----------|----------|----------|
|  |  |   |   |          |   |          |          |          |
|  |  | 3 | • | 1        | 0 | 2        |          |          |
|  |  | + |   | 5        | • | 8        | 7        | 6        |
|  |  |   |   | <u>8</u> | • | <u>9</u> | <u>7</u> | <u>8</u> |
|  |  |   |   |          |   |          |          |          |

|  |  |   |   |          |   |          |          |
|--|--|---|---|----------|---|----------|----------|
|  |  |   |   |          |   |          |          |
|  |  | 6 | • | 0        | 3 |          |          |
|  |  | + |   | 3        | • | 9        | 1        |
|  |  |   |   | <u>9</u> | • | <u>9</u> | <u>4</u> |
|  |  |   |   |          |   |          |          |

|  |  |   |   |          |   |   |          |          |          |
|--|--|---|---|----------|---|---|----------|----------|----------|
|  |  |   |   |          |   |   |          |          |          |
|  |  | 1 | 2 | •        | 0 | 3 | 4        |          |          |
|  |  | + |   |          | 9 | • | 2        | 2        | 7        |
|  |  |   |   | <u>2</u> | 1 | • | <u>2</u> | <u>6</u> | <u>1</u> |
|  |  |   |   | 1        |   |   | 1        |          |          |

|  |  |   |   |          |          |   |          |          |
|--|--|---|---|----------|----------|---|----------|----------|
|  |  |   |   |          |          |   |          |          |
|  |  | 2 | • | 3        | 2        |   |          |          |
|  |  | + |   | 1        | 0        | • | 1        | 7        |
|  |  |   |   | <u>1</u> | <u>2</u> | • | <u>4</u> | <u>9</u> |
|  |  |   |   |          |          |   |          |          |

|  |  |   |   |          |          |   |          |          |   |
|--|--|---|---|----------|----------|---|----------|----------|---|
|  |  |   |   |          |          |   |          |          |   |
|  |  | 5 | • | 7        | 5        |   |          |          |   |
|  |  | + |   | 5        | •        | 3 | 2        |          |   |
|  |  |   |   | +        |          | 5 | •        | 0        | 1 |
|  |  |   |   | <u>1</u> | <u>6</u> | • | <u>0</u> | <u>8</u> |   |
|  |  |   |   | 1        |          |   |          |          |   |

|  |  |   |   |          |          |   |          |          |  |
|--|--|---|---|----------|----------|---|----------|----------|--|
|  |  |   |   |          |          |   |          |          |  |
|  |  | 6 | • | 3        | 7        |   |          |          |  |
|  |  | + |   | 6        | •        | 2 | 6        |          |  |
|  |  |   |   | <u>1</u> | <u>2</u> | • | <u>6</u> | <u>3</u> |  |
|  |  |   |   | 1        |          |   |          |          |  |

|  |  |   |   |          |          |   |          |          |  |
|--|--|---|---|----------|----------|---|----------|----------|--|
|  |  |   |   |          |          |   |          |          |  |
|  |  | 1 | 4 | •        | 9        | 9 |          |          |  |
|  |  | + |   | 1        | 2        | • | 3        | 7        |  |
|  |  |   |   | <u>2</u> | <u>7</u> | • | <u>3</u> | <u>6</u> |  |
|  |  |   |   | 1        |          | 1 |          |          |  |

3 Work out the calculations.

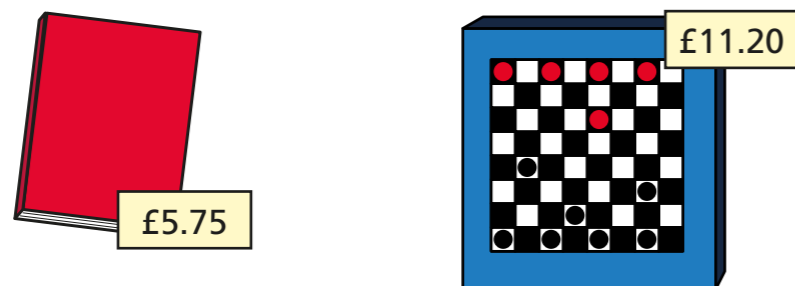
Write  $<$ ,  $>$  or  $=$  to make the statements correct.

a)  $0.64 + 4.79$   $>$   $5.01 + 0.23$

b)  $7.427 + 3.238$   $<$   $5.427 + 5.832$

c)  $3.08 + 4.63$   $=$   $4.84 + 2.87$

4 Teddy is working out the total cost of these items.



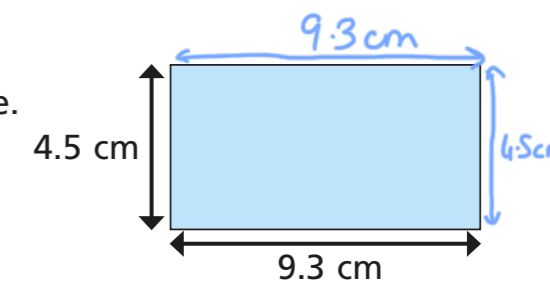
Here are his workings.

$$\begin{array}{r} 5.75 \\ + 11.20 \\ \hline 68.70 \end{array}$$

Talk to a partner about Teddy's mistake.

Work out the correct answer.

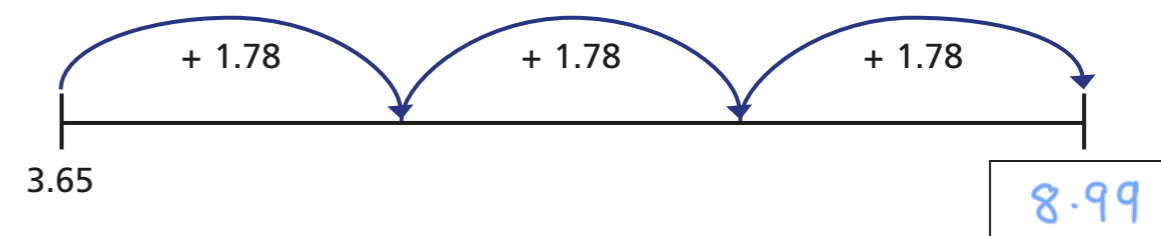
5 Work out the perimeter of the shape.



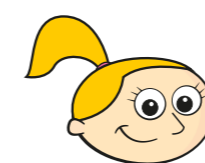
$$\begin{aligned} &4.5 + 9.3 + 4.5 + 9.3 \\ &= 9 + 18.6 \\ &= 27.6 \end{aligned}$$

perimeter =  $27.6$  cm

6 Complete the number line.



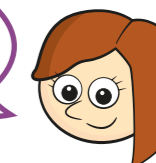
7 Eva starts with the number 1.62



Eva

I added a number and got 2.8

Rosie



This is impossible as 2.8 only has one digit after the decimal.

Is Rosie correct? No

Talk about it with a partner.