Adding and subtracting decimals with a different number of decimal places (problem solving)

1 Work out the calculations.

a) 8.37 + 1.4

```
    8 · 3 7
  + 1 · 4
  ─────────
      ·
```

b) 12.5 + 8.7

```
    1 2 · 5
  +   8 · 7
  ─────────
      ·
```

c) 5.73 − 1.8

```
    5 · 7 3
  − 1 · 8
  ─────────
      ·
```

d) 2.9 − 1.76

```
    2 · 9
  − 1 · 7 6
  ─────────
      ·
```

e) 12.7 + 1.953

```
    1 2 · 7
  +   1 · 9 5 3
  ─────────────
        ·
```

f) 17 − 1.43

```
    1 7
  −   1 · 4 3
  ───────────
        ·
```

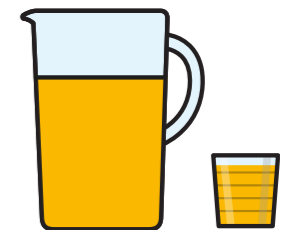**2** Miss Rose drives 12.8 km to pick up a friend and then drives 1.37 km to a coffee shop.

How far does Miss Rose drive in total?

☐ km

3 A full jug contains 1.3 litres of juice.

A glass of juice is poured from a full jug.

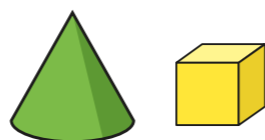The glass contains 0.45 litres of juice.

a) How much juice is left in the jug?

☐ l

b) Another glass of juice is poured from the jug.

This glass contains 0.325 litres of juice.

How much juice is left in the jug now?

☐ l

4 The mass of a cone is 0.3 kg.

The mass of a cube is 0.176 kg.

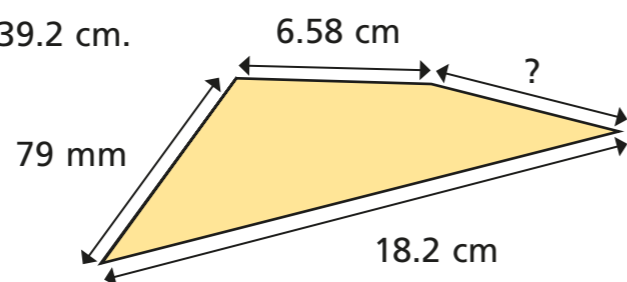What is the total mass of the cone and the cube?

☐ kg

5 Aisha buys this comic.

How much change does she get from a £10 note?

Show all your workings.

RoboBoy

£2.89

£ ☐

6 Here is an irregular quadrilateral.

The perimeter of the shape is 39.2 cm.

Find the unknown length.

6.58 cm

?

79 mm

18.2 cm

☐ cm

Compare methods with a partner.

What is the same and what is different about your methods?

7 A box contains 3.25 kg of washing powder.

Mr Khan uses 80 g of powder per wash.

He does 10 washes.

How much washing powder is left?

☐ kg

8 Ron is 1.18 m tall.

How many centimetres too short is Ron to go on the ride?

Minimum height
1.4 m

☐ cm

9 Annie buys a book and pays with a £20 note. She receives £6.55 change.

Then, Annie goes to the bakery and buys bread with a £5 note. She receives £3.30 change.

What is the total cost of the book and the bread?

£ ☐