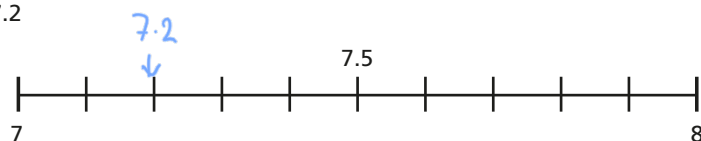# Rounding decimals

1 Show the position of each number on the number line.
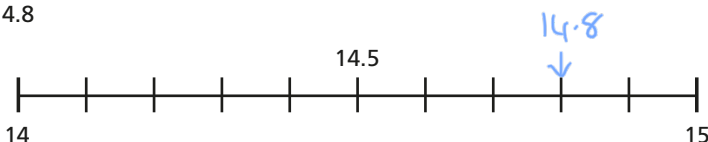
Use the number line to round these decimals to the nearest whole number.

a) 7.2

7·2 ↓

7   7.5   8

The nearest whole number is   7

b) 14.8

14·8 ↓

14.5

14   15

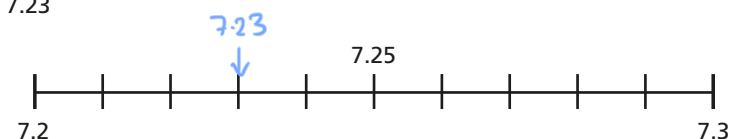The nearest whole number is   15

c) 6.5

6   6·5   7

The nearest whole number is   7

Explain to a partner how to round decimal numbers to the nearest whole number.

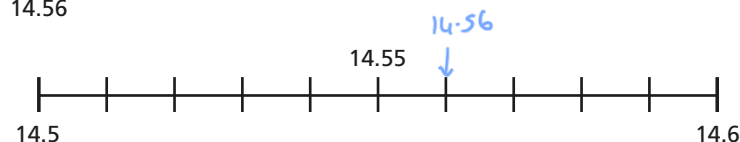**2** Use the number line to round these decimal numbers to the nearest tenth and the nearest whole number.

a) 7.23

7·23 ↓   7.25

7.2   7.3

The nearest tenth is   7·2

The nearest whole number is   7

b) 14.56

14·56 ↓   14.55

14.5   14.6

The nearest tenth is   14·6

The nearest whole number is   15

c) 6.45

6·4   6·45   6·5

The nearest tenth is   6·5

The nearest whole number is   6

Explain to a partner how to round decimal numbers to one decimal place.

3 **a)** When rounding to the nearest tenth, how many digits will there be after the decimal point?

1

b) Round each number to one decimal place.

1.33 — 1·3   4.03 — 4·0

1.34 — 1·3   4.04 — 4·0

1.35 — 1·4   4.05 — 4·1

1.36 — 1·4   4.06 — 4·1

1.37 — 1·4   4.07 — 4·1

4 Round each number to the nearest tenth.

a) 4.21 — 4·2   **d)** 11.86 — 11·9   **g)** 12.92 — 12·9

b) 8.09 — 8·1   **e)** 5.67 — 5·7   **h)** 10.65 — 10·7

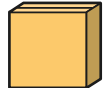**c)** 4.84 — 4·8   **f)** 0.15 — 0·2

5 Circle each decimal that rounds to 6.2

6.32   (6.23)   6.27   (6.17)   6.12   6.25

Explain your reasoning.

They are greater than 6·15 but less than 6·25

6 Here are the weights in kilograms of some parcels.

3.48 kg   1.42 kg   10.65 kg   1.03 kg

a) Round the weight of each parcel to 1 decimal place.

3·5 kg   1·4 kg   10·7 kg   1·0 kg

b) The weight of each parcel has been rounded to the nearest 100g.

Is this true or false? true

Talk about it with a partner.

7 Amir is thinking of a number.

Rounded to the nearest whole his number is 5
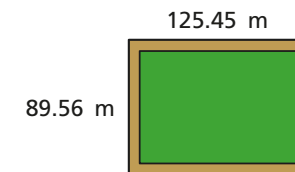
Rounded to the nearest tenth his number is 4.8

Write at least four different numbers that Amir could be thinking of.

e.g.   4.75,   4.79,   4.81,   4.84

8 A farmer is building a new fence for her sheep field.

Here are the measurements.

125.45 m

89.56 m

She wants to build a fence around the whole field.

Estimate how much fencing you think she will need.

125·5 + 89·6 + 125·5 + 89·6

= 251 + 179·2   430·2m

Talk about your estimate with a partner.