**1**

[2008]

This scale shows the dates of floods and the height of the water in the floods.

Height of water (metres)

3 — 
2·6 ← 1969
2 — ← 1955
1·8
1·6
1·4 ← 1977
1·2
1 —
0·8 ← 1948
0·6
0·4 ← 2001
0·2
0 —

Year of flood
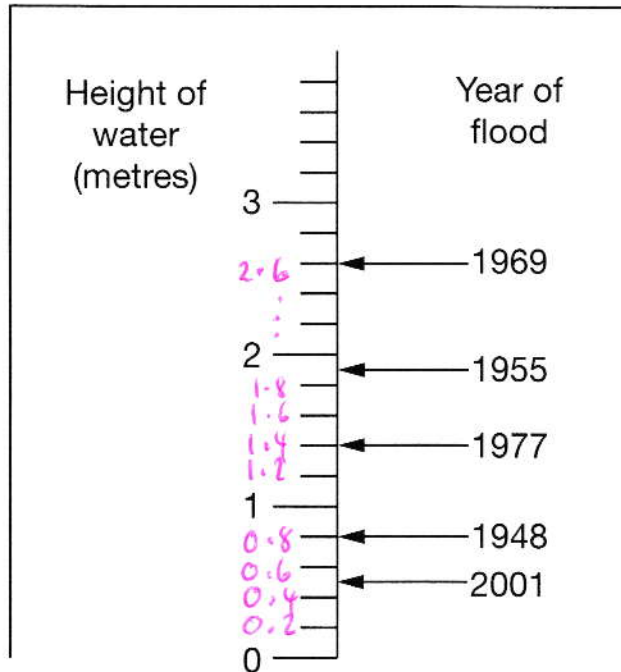
How high was the water in the 1955 flood?

[BETWEEN 1·8 AND 2·0]

1·9  m

How much higher was the water in the 1969 flood than in the 1948 flood?

2·6  [1969]
= 0·8  [1948]
1·8

1·8  m

[2 marks]

**2**

[2007]

Kate has a piece of ribbon **one metre** long.

She cuts off 30 centimetres.

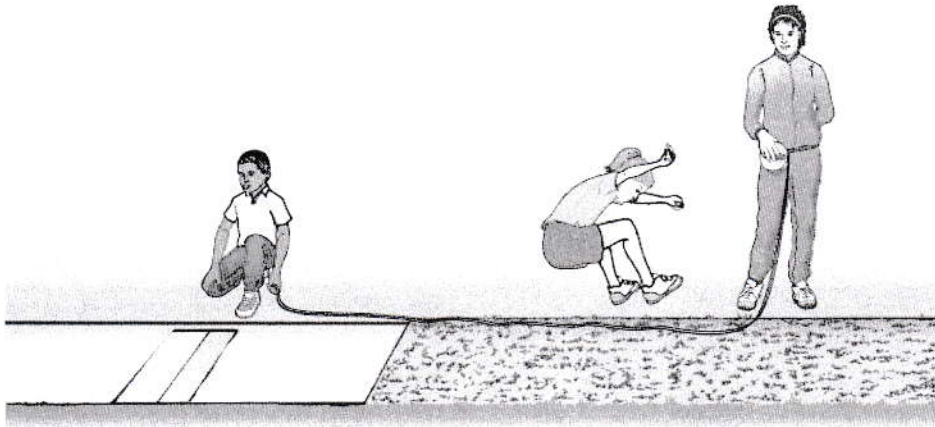*{100 cm = 1 metre!}*

How many centimetres of ribbon are left?

✏️ **70** **cm**

[1 mark]

---

**3**

[2012]



Seb made a jump of two and a half metres. → *2m 50cm!*

Kirsty's jump was 15 centimetres longer.
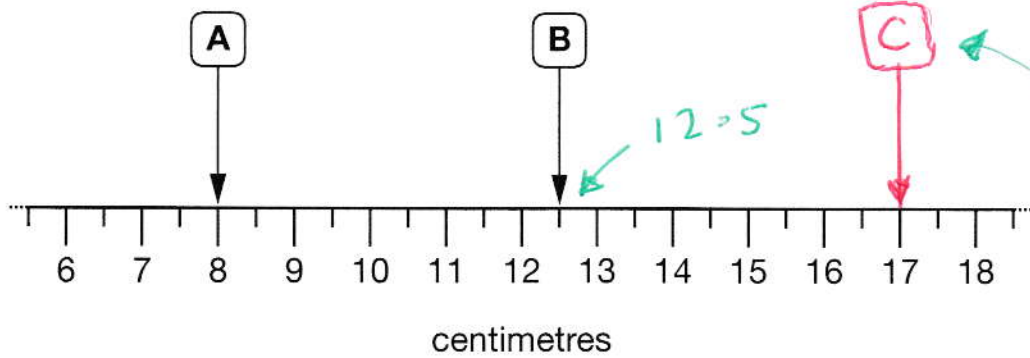
How long was Kirsty's Jump?

**2m 65cm**

*[or 2·65m or 265cm]*

[1 mark]

Here is part of a centimetre scale, with two points marked.



12·5

What is the distance between point **A** and point **B**?

12·5 − 8 = 4·5

4·5 cm

Point **C** is **twice as far** from point A as it is from point B.

On the scale above, mark one place where point C could be.

1ST  2×4·5 = 9     2ND    8 + 9 = 17 cm.          [2 marks]

Tick (✓) the best estimate for the **height of a door**.

☐ 2 millimetres      ☐ 2 centimetres

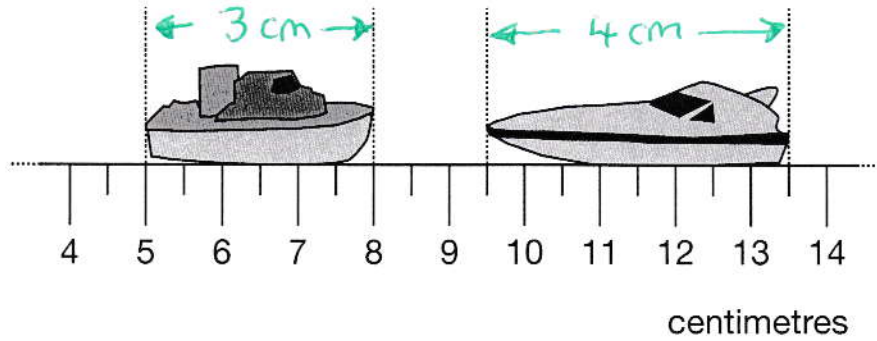✓ 2 metres           ☐ 2 kilometres

[1 mark]

**6**

[2011]

Here are two model boats on a centimetre scale.



**How far apart are the boats?**

1·5 cm

**What is the difference in the lengths of the two boats?**

4 - 3 = 1cm

1 cm

[2 marks]

**7**

[Extra]

Fill in the gaps using units of **length**.

The first one is done for you.

There are 10 | mm | in one | cm

There are 100 | cm | in one | METRE | ['m' is okay]

There are 1000 | METRES | in one | km

['m' is okay]

[2 marks]

**8**

Here are a pencil sharpener, a key and a rubber.

8.3cm

0   1   2   3   4   5   6   7   8   9   cm

2.4cm          5.3 cm
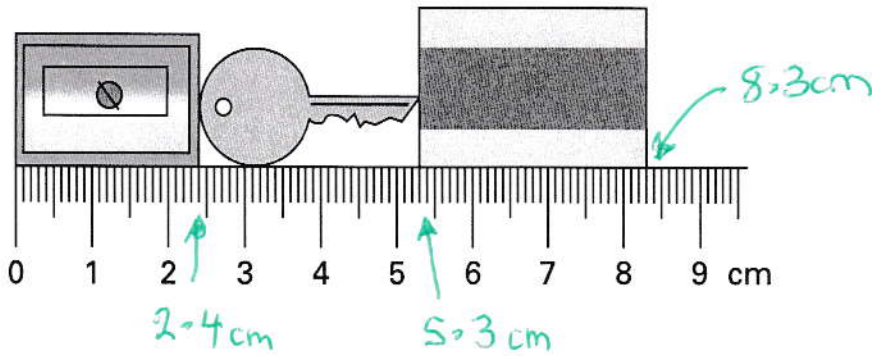
What is the length of **all three things** together?

Give your answer in **millimetres**.

83   mm

What is the length of the **key**?

Give your answer in **millimetres**.

4 5 13
- 2 4
2 9

29   mm

[2 marks]

**9**

Which value completes the sentence? Tick (✓) the correct box

The **length** of a **banana** is about...

☐ 2 cm

✓ 20 cm

☐ 200 cm

☐ 2000 cm

[1 mark]

Tick (✓) the best estimate for the **length of a pen.**

☐ 14 millimetres     ✓ 14 centimetres

☐ 14 metres          ☐ 14 kilometres

[1 mark]

---

Write these lengths in order, starting with the shortest.

$\frac{1}{2}$ m          3.5cm

[50cm]

25mm          20cm

[2.5cm]

*I FOUND IT EASIEST TO CHANGE THEM ALL TO cm!*

| 25mm | 3.5cm | 20cm | $\frac{1}{2}$m |

shortest

*USE ORIGINAL UNITS!*

[2 marks]

---

Tick (✓) the best estimate for the distance between **Leeds** and **Manchester.**

☐ 64 millimetres     ☐ 64 centimetres

☐ 64 metres          ✓ 64 kilometres

[1 mark]
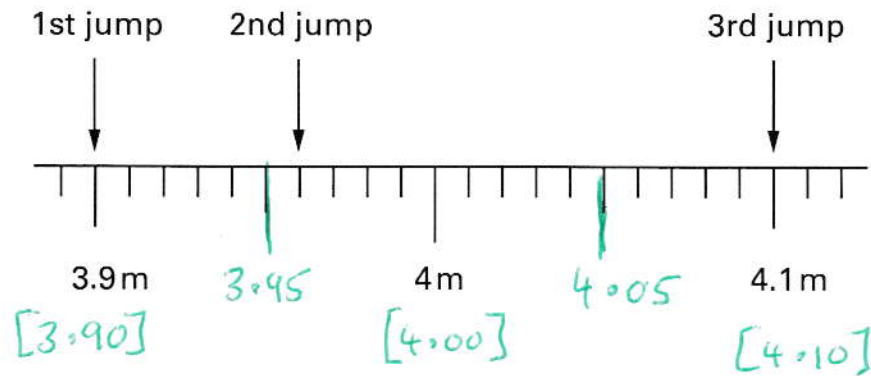
**13**

Peter took part in a long jump competition.

He had three jumps.

The arrows on the scale show how far he jumped each time.

| 1st jump | 2nd jump | | 3rd jump |
|---|---|---|---|

3.9 m   3·45   4 m   4·05   4.1 m
[3·90]        [4·00]        [4·10]

How far did Peter jump on his **2nd** jump?

✏ | 3·96 m |

Peter jumped further on his **3rd** jump than on his **1st** jump.

How much further?

Write your answer in metres.

    4·1
  - 3·9
  ─────
    0·2

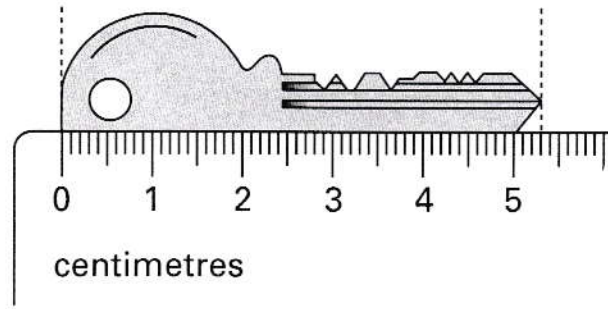✏ | 0·2 m |

Now write your answer in centimetres.

✏ | 20 cm |

[3 marks]

The diagrams in this question are not drawn accurately.
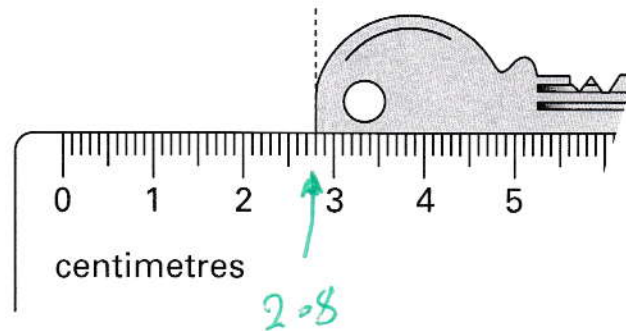
The diagram shows Jo's key.



Use the scale to find the length of Jo's key.

5·3 cm

This time you cannot see all of Jo's key.



2·8

One end is at 2.8 cm on the scale.

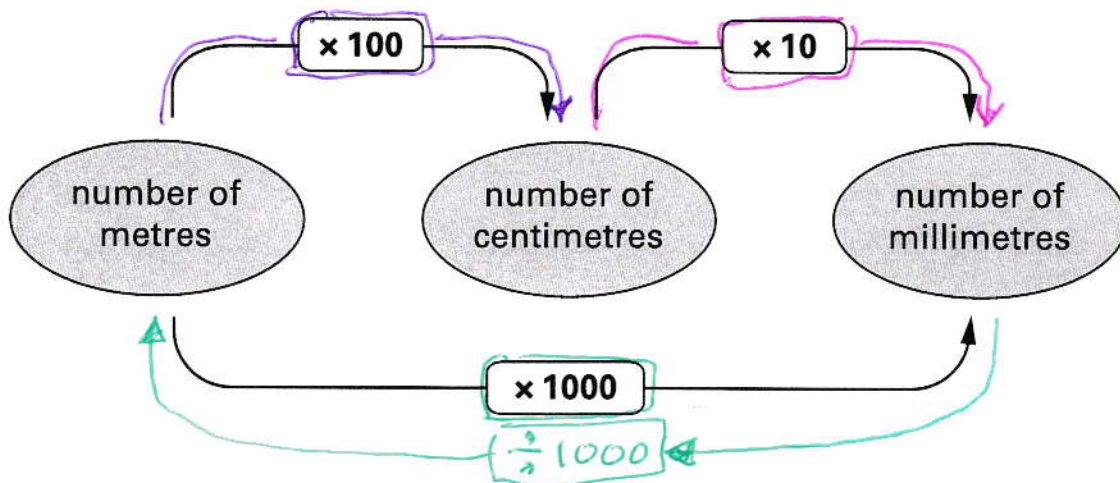Where is the other end on the scale?

2·8
+ 5·3
8·1

8·1 cm

[2 marks]

Look at the diagram.

It shows how to change metres into centimetres and millimetres.



Change **5 metres** into centimetres.

$5 \times 100$

✏️ ...500.... centimetres

Change **9 centimetres** into millimetres.

$9 \times 10$

✏️ ...90.... millimetres

Change **8000 millimetres** into metres.

$8000 \div 1000$

✏️ ...8.... metres

[3 marks]

**16**

Circle **one** amount to make the sentence correct.

The distance from
London to Manchester is about …

| 320 m |
|---|
| 3200 m |
| 32 km |
| (320 km) |

[1 mark]

---

**17**

Dave and Steve are in a high jump competition.

Dave jumps $1\frac{1}{4}$ metres.  $[1.25m]$

Steve jumps **1.4** metres.

Who jumps higher? Tick (✓) Dave or Steve.

☐ Dave      ☑ Steve

**How much higher** does he jump?

Give your answer in metres.

Show your method

```
  1·4 0
- 1·2 5
-------
  0·1 5
```

0·15 m

[3 marks]

**18**

[2012]

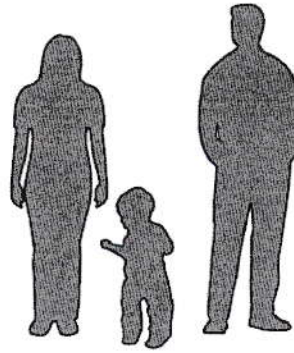Freddie is half as tall as his mother.

Freddie is one metre shorter than his father.

Freddie's father is 182 centimetres tall.

1ST  FREDDIE → 182 - 100
= 82cm

How many centimetres tall is Freddie's mother?

2ND  mum → 82 × 2
= 164cm

164  cm

[1 mark]

**19**

[2017]

On a map, 1cm represents 20 km.

× 20
÷ 20

0    20   40   60   80   100
|----|----|----|----|----|
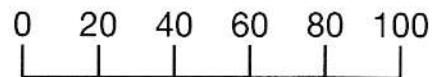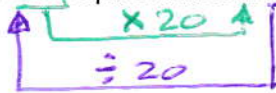
kilometres

The distance between two cities is **250 km**.

On the map, what is the distance between the two cities?

Show your method

250 ÷ 20
= 25 ÷ 2
= 12.5

12.5 cm

[2 marks]