MEASURING LENGTH-SET-1-QP

1 A piece of cotton is measured between two points on a ruler.
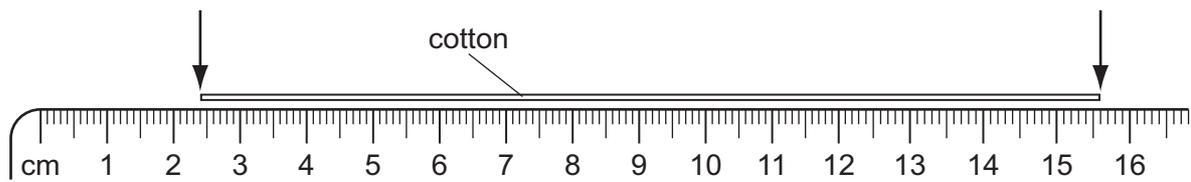
cotton

cm 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

When the length of cotton is wound closely around a pen, it goes round six times.

pen   six turns of cotton
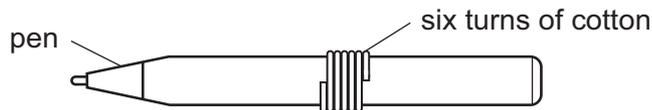
What is the distance once round the pen?

A 2.2 cm   **B** 2.6 cm   **C** 13.2 cm   **D** 15.6 cm

2 A decorator wishes to calculate the area of a bathroom tile so that he can estimate the amount of adhesive that he needs to buy.

What must he use?

A a measuring cylinder only

B a ruler only

C a measuring cylinder and a clock only

D a measuring cylinder and a ruler only

3 The diagram shows a thick-walled tube. The thickness of the wall is 3 mm.

d

0 cm 1   2   5   6   7   8   10   11
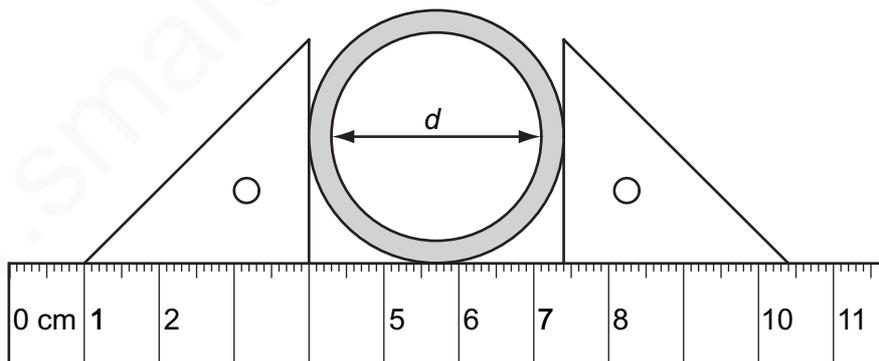
What is the internal diameter d of the tube?

A 2.8 cm   **B** 3.1 cm   **C** 3.4 cm   **D** 7.4 cm

4 Some liquid is heated in a flask.

The diagrams show the height of the liquid in the tube when the liquid is cold and when it is hot.

cold   hot
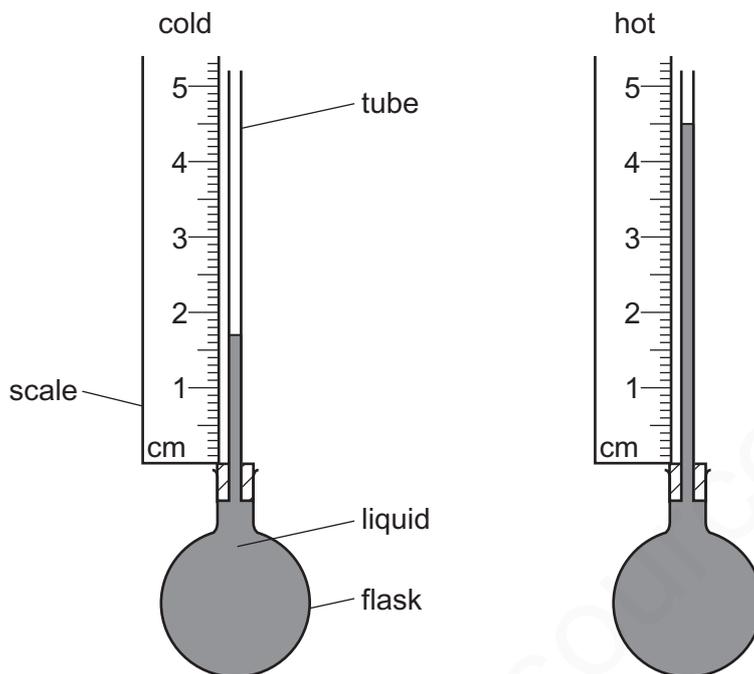
What is the difference in the heights?

A   1.7 cm   **B**   2.8 cm   **C**   3.2 cm   **D**   4.5 cm

5 A metre rule is used to measure a length.

Which reading is shown to the nearest millimetre?

A   0.7 m   **B**   0.76 m   **C**   0.761 m   **D**   0.7614 m

6 The diagram shows an enlarged drawing of the end of a metre rule. It is being used to measure the length of a small feather.
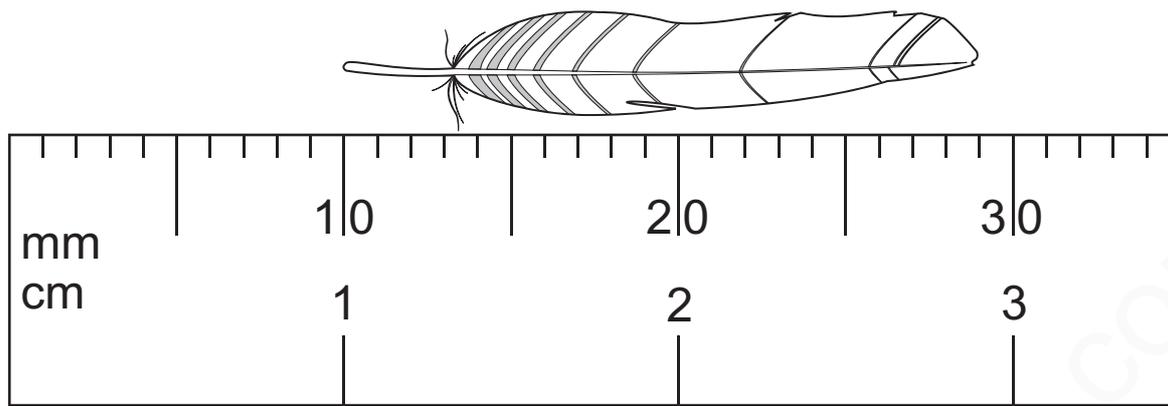
What is the length of the feather?

A 19 mm   **B** 29 mm   **C** 19 cm   **D** 29 cm

7 A cylindrical can is rolled along the ruler shown in the diagram.
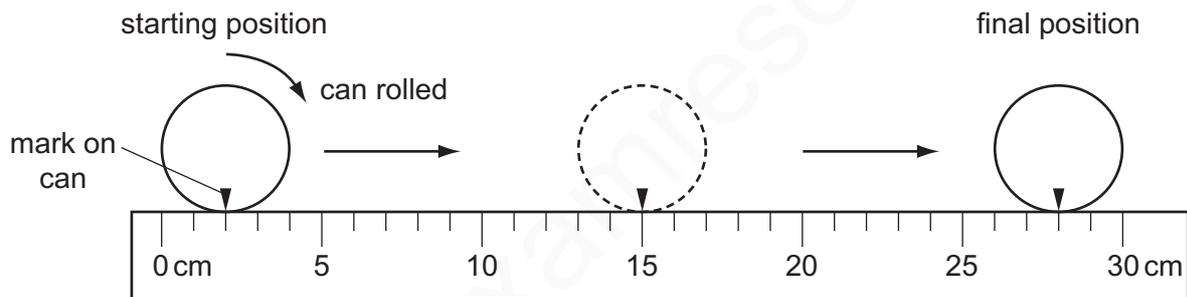
The can rolls over twice.

What is the circumference (distance all round) of the can?

A 13 cm   **B** 14 cm   **C** 26 cm   **D** 28 cm

8 A student measures the length of a rod XY by holding it next to a metre rule.

X   Y

99   98   97   96   95   94

cm
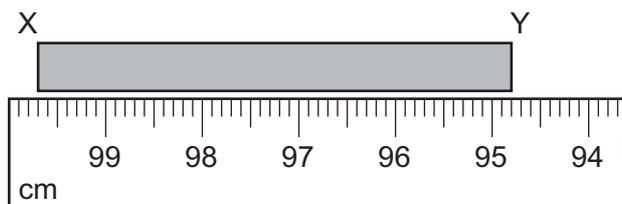
The student writes down the length as 94.8 cm.

Which statement is correct?

A The value is correct.

B The value is incorrect because it should be 95.2 cm.

C The value is incorrect because it should be in millimetres.

D The value is incorrect because the student should subtract the reading for end Y from the reading for end X.

9 The diagram shows part of a ruler. The ruler is used to find the length of a nail.

0   1   2

cm
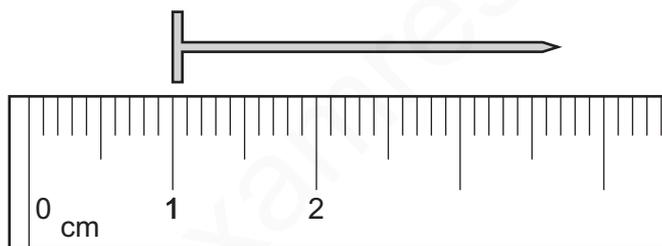
What is the length of the nail?

A 2.2 cm   **B** 2.7 cm   **C** 3.2 cm   **D** 3.7 cm

10 What is the most accurate and precise method to measure the thickness of a coin?

A Use a micrometer screw gauge.

B Use a ruler and look at the scale perpendicularly.

C Use a top pan balance.

D Use the displacement method with water in a measuring cylinder.

11 A length of cotton is measured between two points on a ruler.
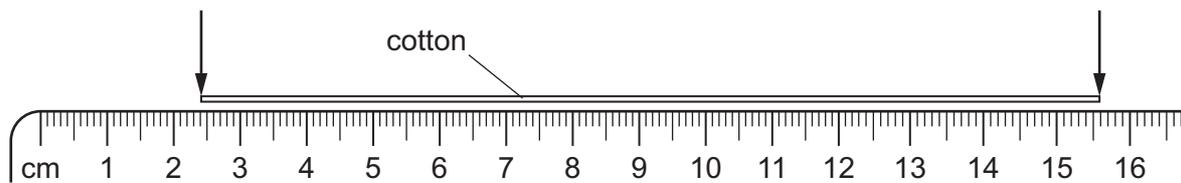
When the length of cotton is wound closely around a pen, it goes round six times.

What is the distance once round the pen?

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