

BOUNDS-SET-2

1

One year ago Ahmed's height was 114 cm.
Today his height is 120 cm.
Both measurements are correct to the nearest centimetre.

Work out the upper bound for the increase in Ahmed's height.

Answer cm [2]

2

The sides of an equilateral triangle are 9.4 cm, correct to the nearest millimetre.

Work out the upper bound of the perimeter of this triangle.

..... cm [2]

3	<p>The base of a triangle is 9 cm correct to the nearest cm. The area of this triangle is 40 cm² correct to the nearest 5 cm².</p> <p>Calculate the upper bound for the perpendicular height of this triangle.</p> <p style="text-align: right;">..... cm [3]</p>
4	<p>(a) $V = IR$</p> <p>In an experiment I and R are both measured correct to 1 decimal place. When $I = 4.0$ and $R = 2.7$, find the lower bound for V.</p> <p style="text-align: right;">..... [2]</p> <p>(b) $S = \frac{D}{T}$</p> <p>In an experiment D and T are both measured correct to 2 significant figures. When $D = 7.6$ and $T = 0.23$, find the upper bound for S.</p> <p style="text-align: right;">..... [2]</p>

5	<p>Anna walks 31 km at a speed of 5 km/h. Both values are correct to the nearest whole number.</p> <p>Work out the upper bound of the time taken for Anna's walk.</p> <p style="text-align: right;">..... hours [2]</p>
6	<p>(a) The length of the side of a square is 12 cm, correct to the nearest centimetre.</p> <p>Calculate the upper bound for the perimeter of the square.</p> <p style="text-align: right;">..... cm [2]</p> <p>(b) Jo measures the length of a rope and records her measurement correct to the nearest ten centimetres. The upper bound for her measurement is 12.35 m.</p> <p>Write down the measurement she records.</p> <p style="text-align: right;">..... m [1]</p>
7	<p>An equilateral triangle has sides of length 15 cm, correct to the nearest centimetre.</p> <p>Calculate the upper bound of the perimeter of this triangle.</p> <p style="text-align: right;">..... cm [1]</p>

8	$A = \frac{b \times h}{2}$ <p>$A = 10$, correct to the nearest whole number. $h = 4$, correct to the nearest whole number.</p> <p>Work out the upper bound for the value of b.</p> <p style="text-align: right;">..... [3]</p>
9	<p>A rectangle has sides of length 6.1 cm and 8.1 cm correct to 1 decimal place.</p> <p>Calculate the upper bound for the area of the rectangle as accurately as possible.</p> <p style="text-align: right;"><i>Answer</i> cm² [2]</p>

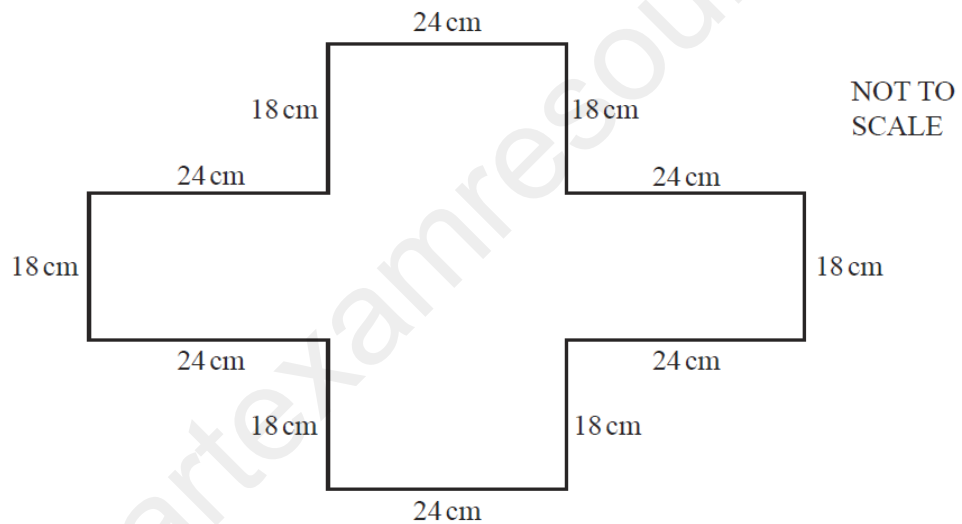
10

A rectangle has sides of length 2.4 cm and 6.4 cm correct to 1 decimal place.

Calculate the upper bound for the area of the rectangle as accurately as possible.

Answer cm² [2]

11



Each of the lengths 24 cm and 18 cm is measured correct to the nearest centimetre.
Calculate the upper bound for the perimeter of the shape.

Answer cm [3]