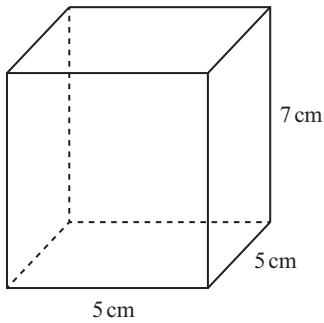


19



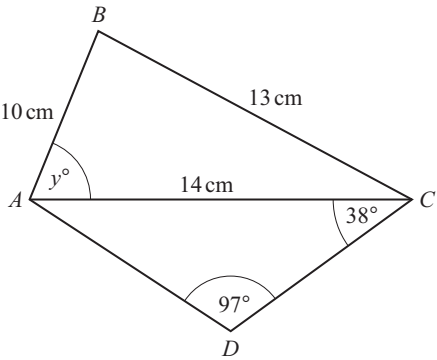
NOT TO
SCALE

The diagram shows a box in the shape of a cuboid.
Mala has a straight rod of length 10 cm.

Show that this rod does **not** fit completely inside the box.

[3]

29



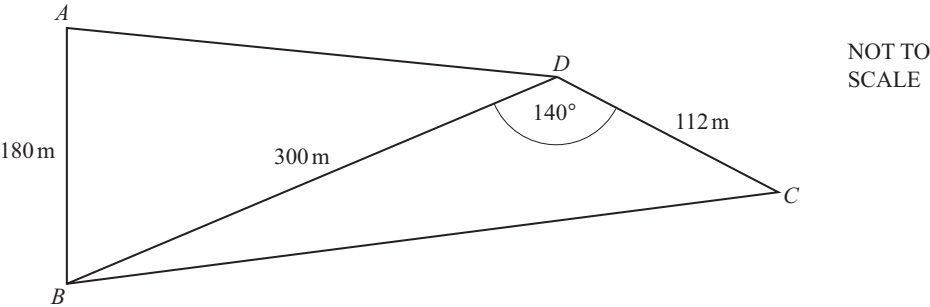
NOT TO
SCALE

(a) Calculate the value of y .

$y =$ [3]

(b) Calculate BD .

15



The diagram shows a field, $ABCD$, in the shape of a quadrilateral.
 BD is a straight path across the field.

(a) Calculate BC .

$BC = \dots\dots\dots$ m [3]

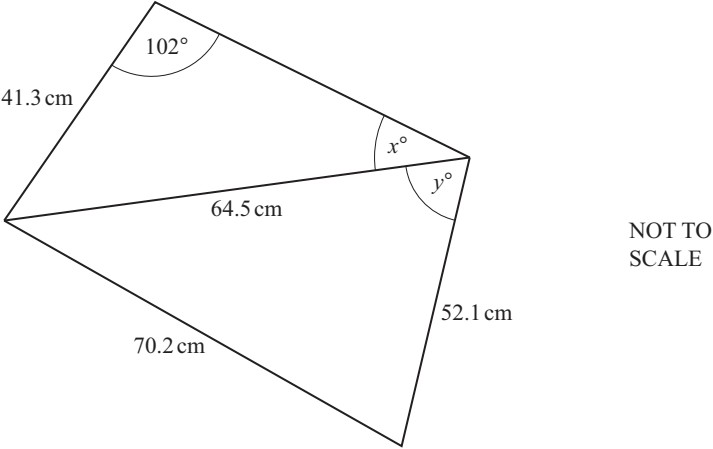
(b) Calculate angle DBC .

Angle $DBC = \dots\dots\dots$ [3]

(c) The total area of the field, $ABCD$, is $35\,900\text{ m}^2$.

Work out the length of the shortest distance from D to AB .

18



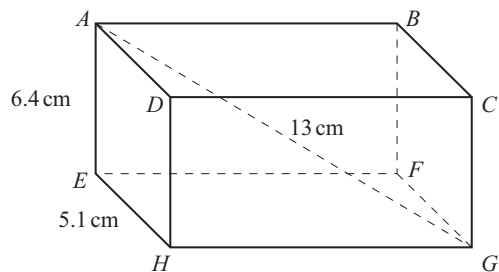
(a) Calculate the value of x .

$x = \dots\dots\dots$ [3]

(b) Calculate the value of y .

$y = \dots\dots\dots$ [3]

24



NOT TO
SCALE

The diagram shows a cuboid $ABCDEFGH$.
 $AE = 6.4$ cm, $EH = 5.1$ cm and $AG = 13$ cm.

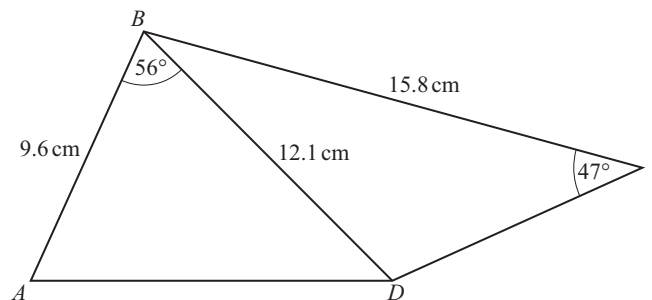
- (a) Calculate EF .

$EF = \dots\dots\dots$ cm [3]

- (b) Calculate the angle between the line AG and the base $EFGH$ of the cuboid.

$\dots\dots\dots$ [3]

17



NOT TO
SCALE

The diagram shows a quadrilateral $ABCD$.

- (a) Calculate AD .

$AD = \dots\dots\dots$ cm [3]

- (b) Calculate the obtuse angle BDC .

Angle $BDC = \dots\dots\dots$ [4]

- (c) Calculate the area of the quadrilateral.

$\dots\dots\dots$ cm² [3]