

Name:

Exam Style Questions

Constructing Triangles



Corbettmaths

Equipment needed: Pencil, compasses, ruler & protractor

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

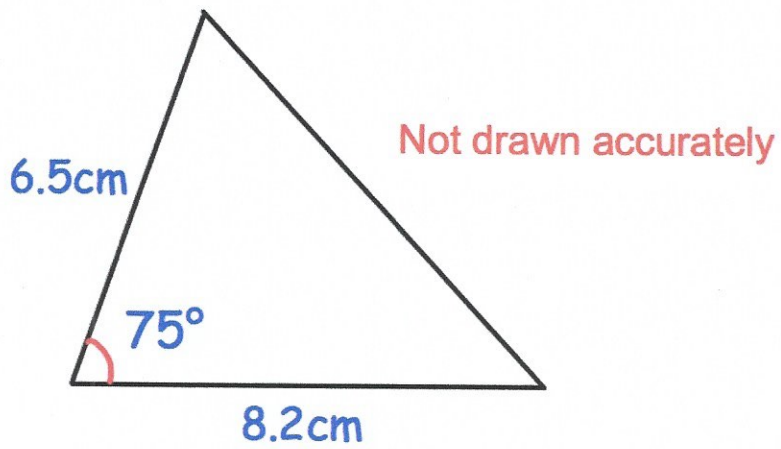
Videos 81, 82, 83



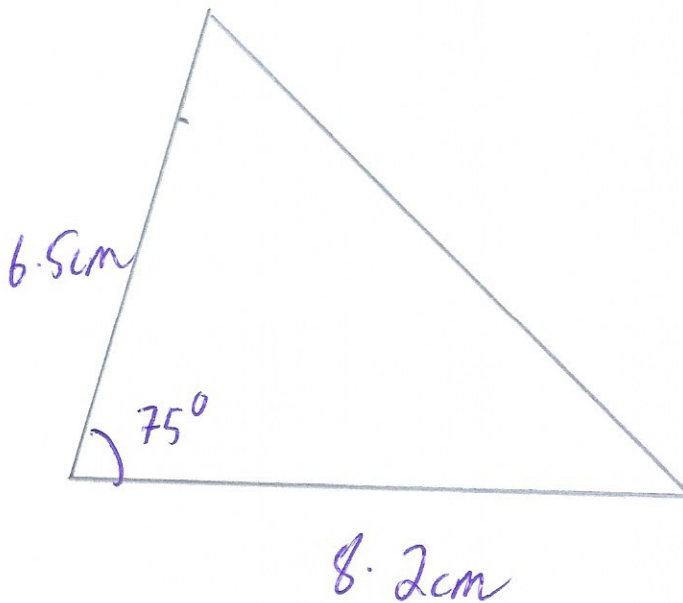
Answers and Video Solutions



1. Shown below is a triangle that is not drawn accurately.

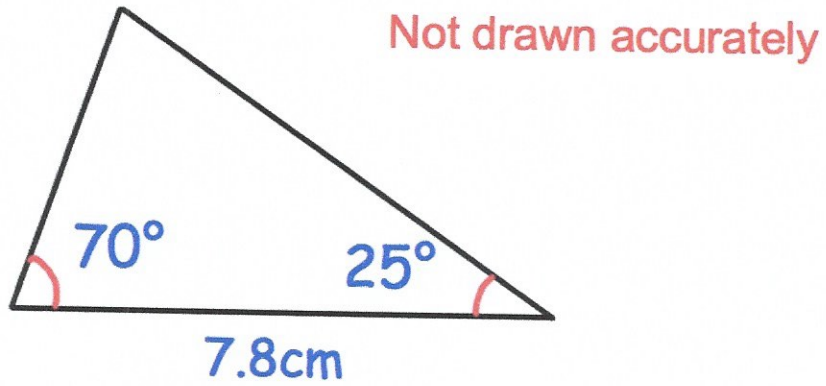


Make an accurate drawing of the triangle in the space below.

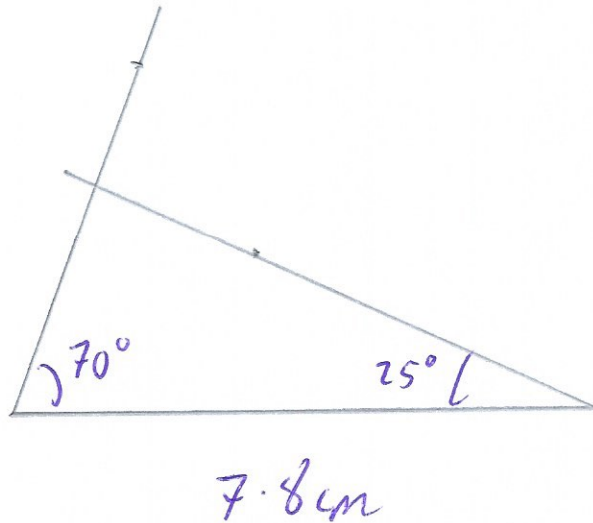


2.

Shown below is a triangle that is not drawn accurately.



Make an accurate drawing of the triangle in the space below.

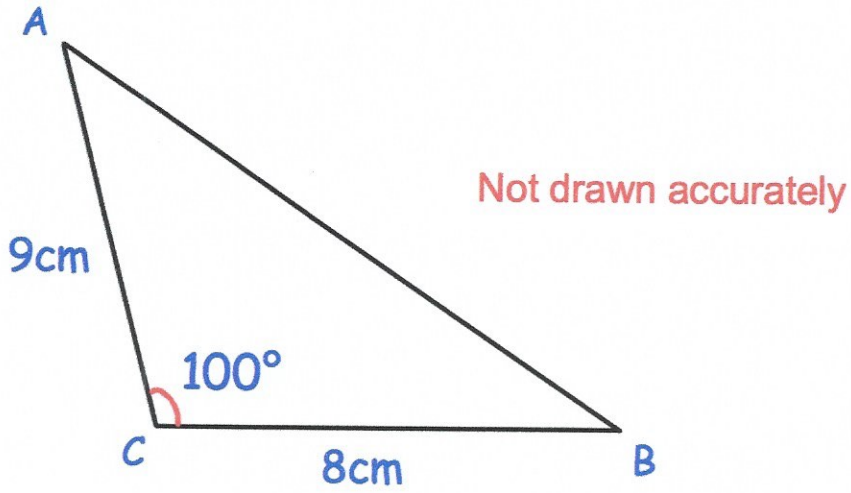


(3)

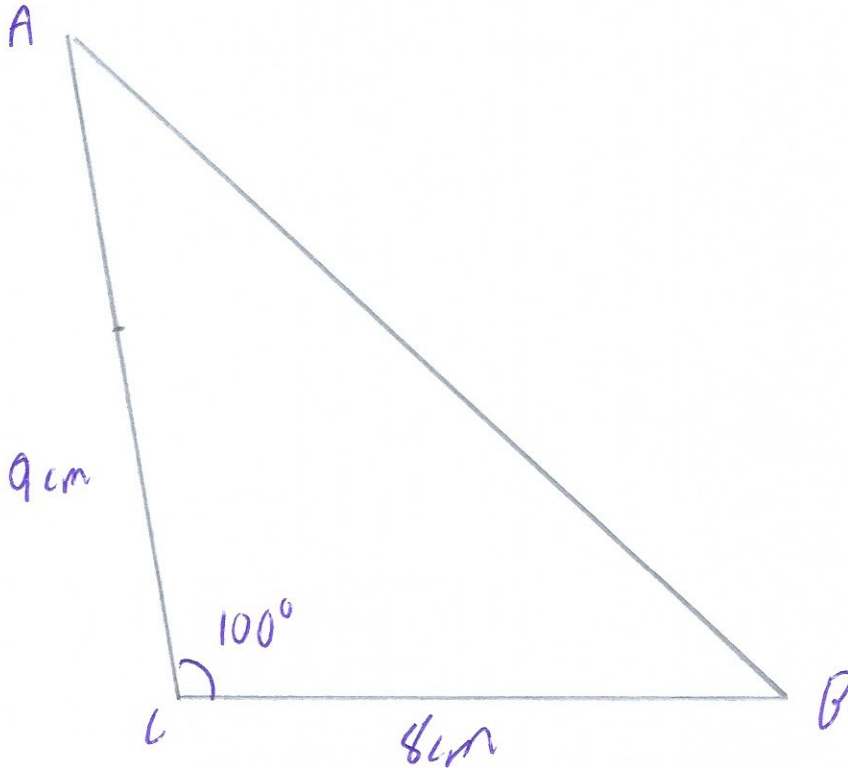
3.



Shown below is triangle ABC.
It has not been drawn accurately.



(a) Make an accurate drawing of ABC in the space below.



(3)

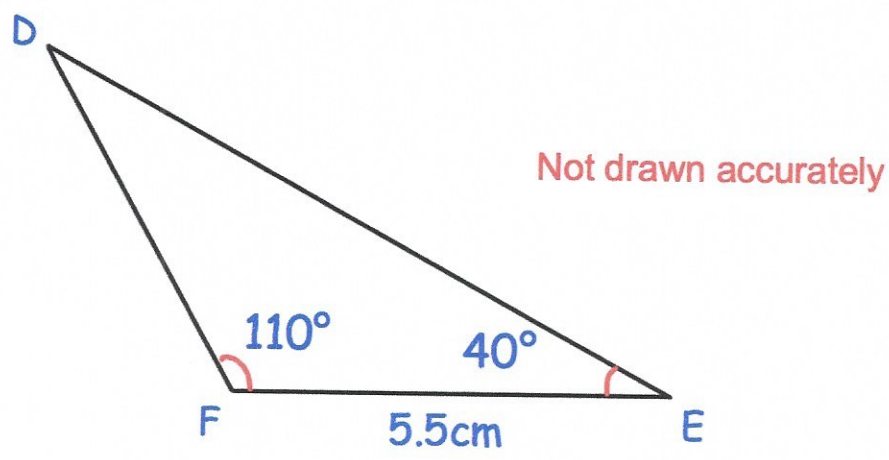
(b) Measure the actual length of AB.

.....13.....cm

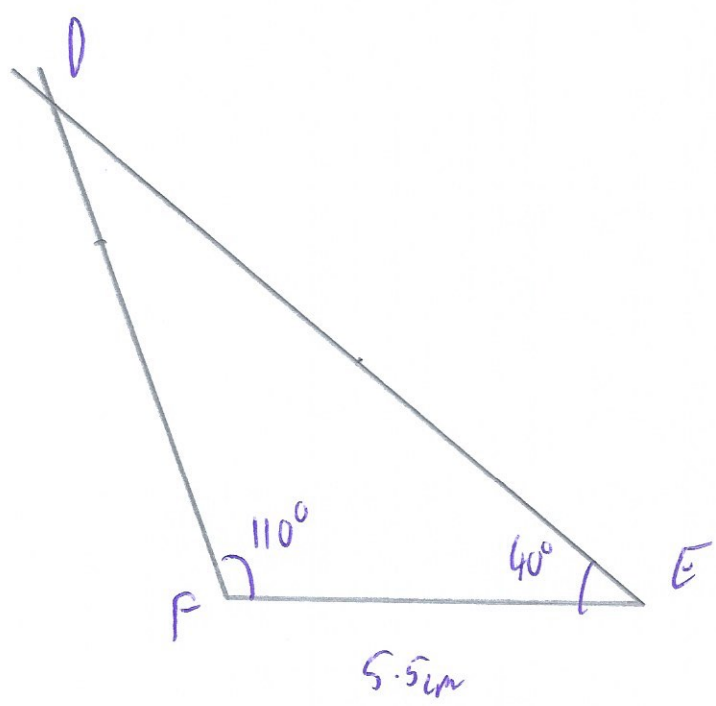
(1)

* based on my drawing.

4. Shown below is triangle DEF.
It has not been drawn accurately.



(a) Make an accurate drawing of DEF in the space below.



(3)

(b) Measure the actual length of DE.

10.3 cm
* based on my drawing (1)

5.



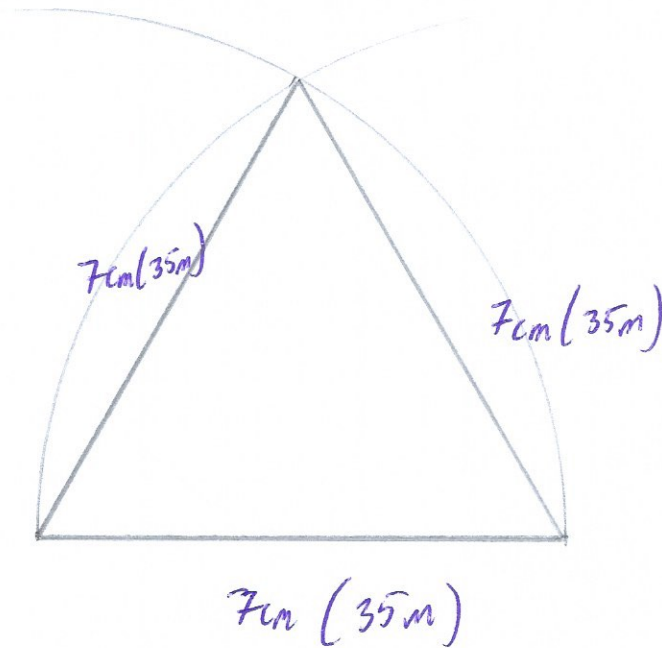
A farmer has a field.

The field is an equilateral triangle with side length 35 metres.

Construct a scale drawing of the field.

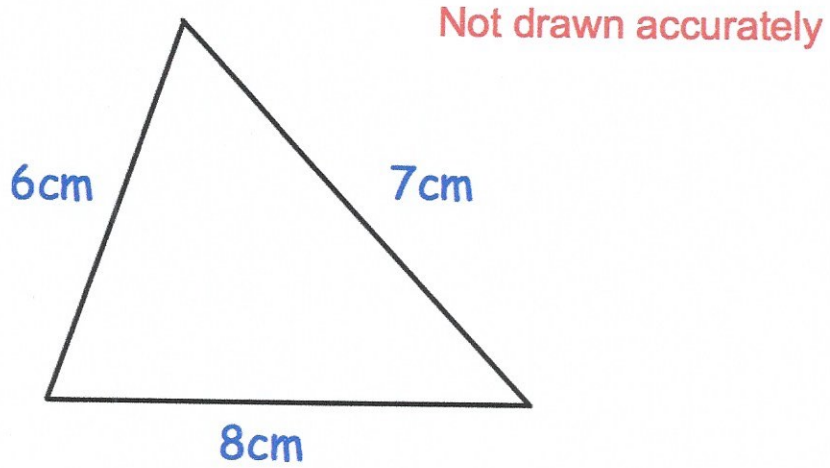
Use the scale 1cm = 5m

$$35 \div 5 = 7 \text{ cm}$$

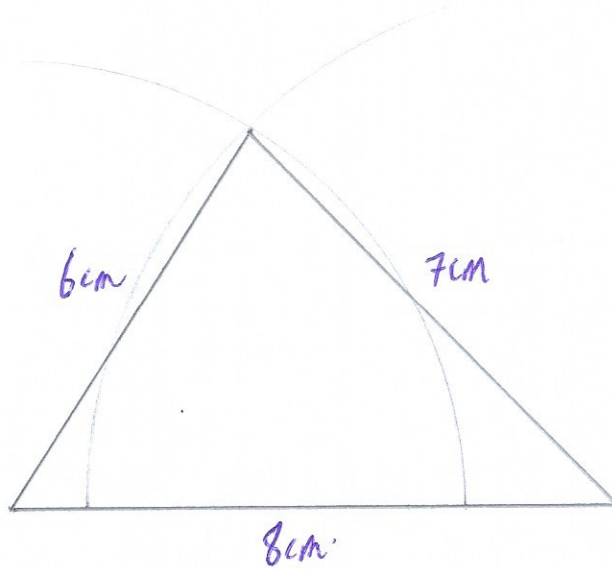


(3)

6. Shown below is a triangle that has not been drawn accurately.



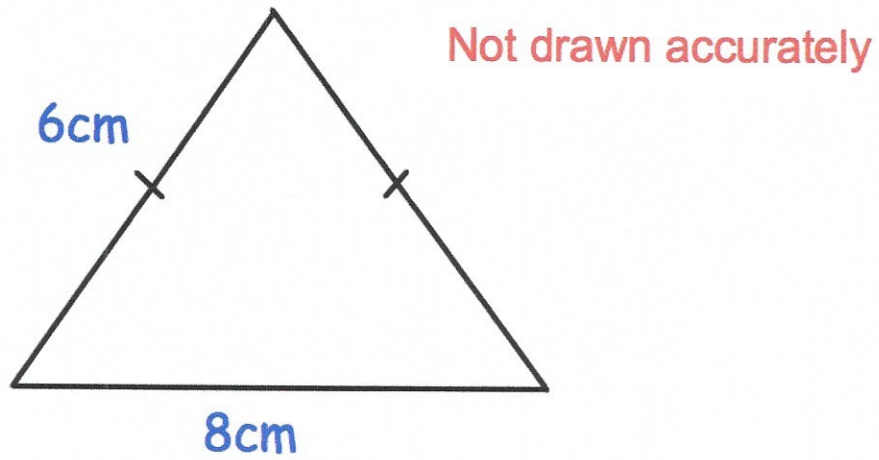
Accurately construct the triangle in the space below.



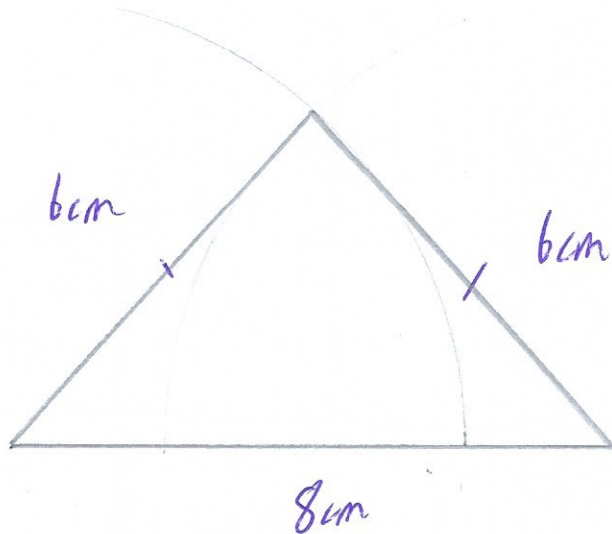
7.



Shown below is an isosceles triangle that has not been drawn accurately.



Accurately construct the triangle in the space below.

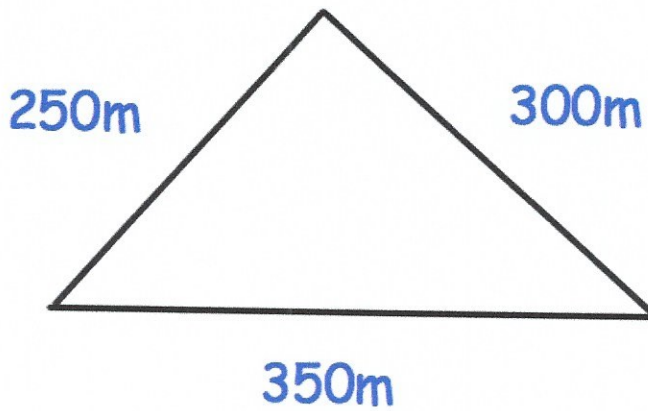


(3)

8. A triangular field is sketched below.
It has sides 250m, 300m and 350m.

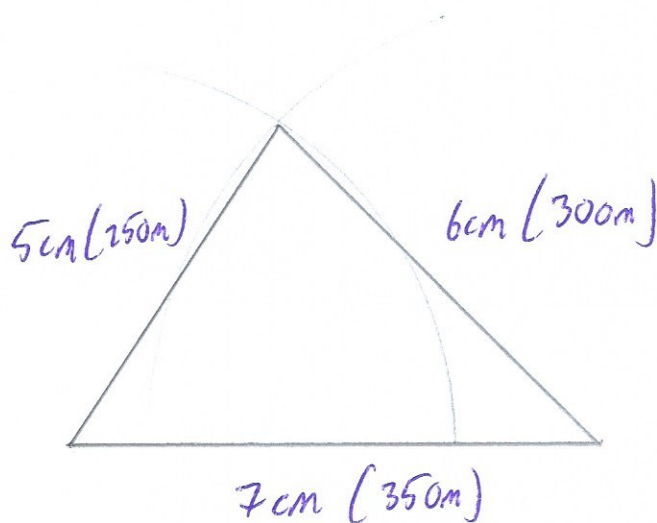


Not drawn accurately



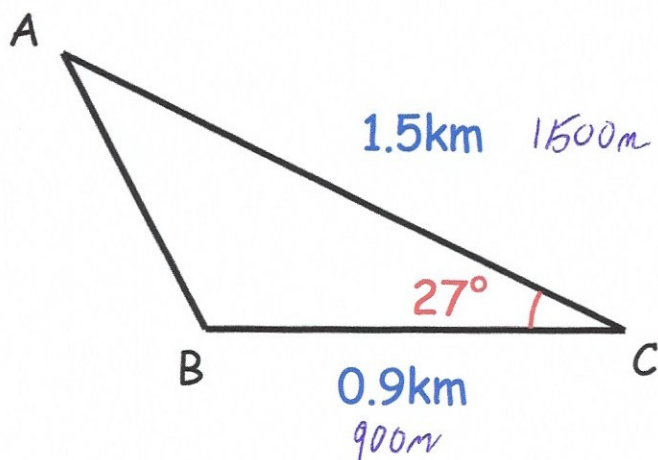
Draw the triangle accurately, using a scale of 1 cm to 50m.

$$\begin{aligned}250 \div 50 &= 5 \text{ cm} \\300 \div 50 &= 6 \text{ cm} \\350 \div 50 &= 7 \text{ cm}\end{aligned}$$



(3)

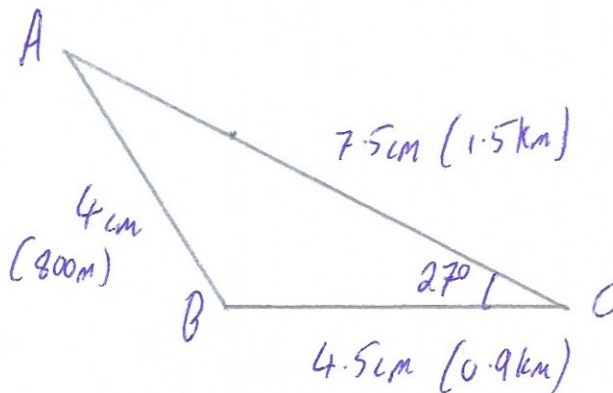
9. The sketch below shows three locations, A, B and C.



(a) Draw a scale drawing of the triangle below.
Use a scale of 1cm = 200m

$$900 \text{ m} \div 200 = 4.5$$

$$1500 \div 200 = 7.5$$



(3)

Claire flies a drone from location A directly to location B.
She then flies the drone from location B directly to location C.

(b) Use your scale drawing to work out how far the drone has travelled.

$$A \rightarrow B \quad 800\text{m}$$

$$B \rightarrow C \quad 900\text{m}$$

$$\begin{array}{r} 1700\text{m} \\ \hline 1.7\text{km} \end{array} \quad (2)$$