Name:

Exam Style Questions

Sine Rule
Cosine Rule
Area of a Triangle - Sine

Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

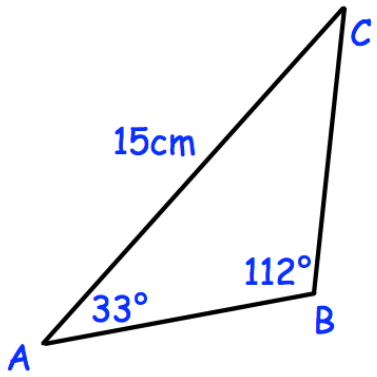
1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

www.corbettmaths.com/contents

Video 333
Video 334
Video 335
Video 336
Video 337

1.

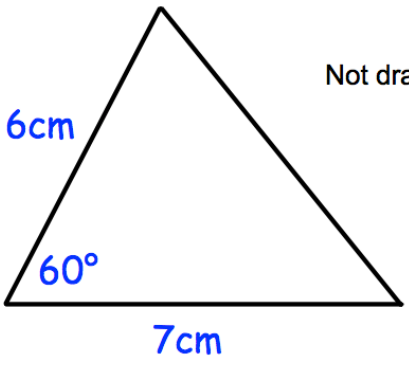


In triangle ABC the length of AC is 15cm.
Angle ABC = 112°
Angle BAC = 33°

Work out the length of BC.

.....cm
(3)

2.

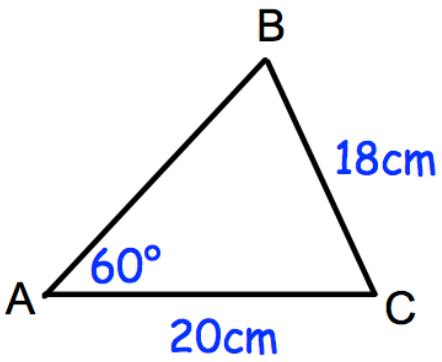


Not drawn is scale.

Calculate the area of the triangle.

.....cm²
(2)

3.

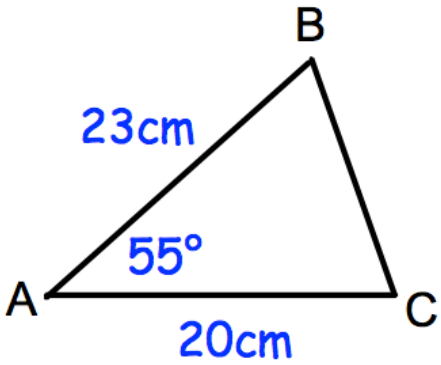


Calculate the size of angle ABC.

.....°

(3)

4.

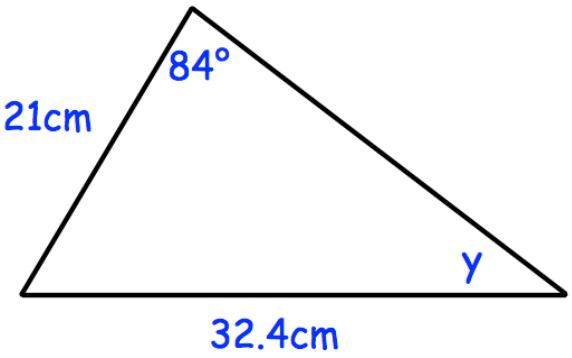


Calculate the length of BC.

.....cm

(3)

5.

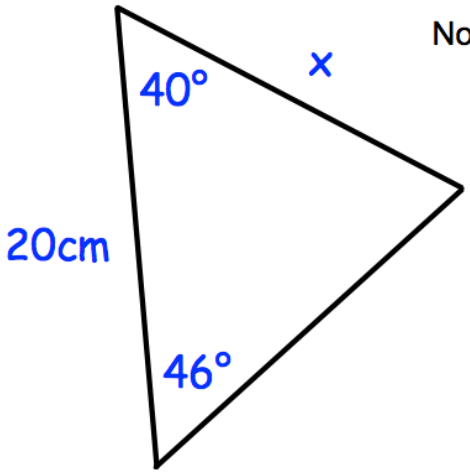


Calculate the size of the angle labelled y.

.....°

(3)

6.

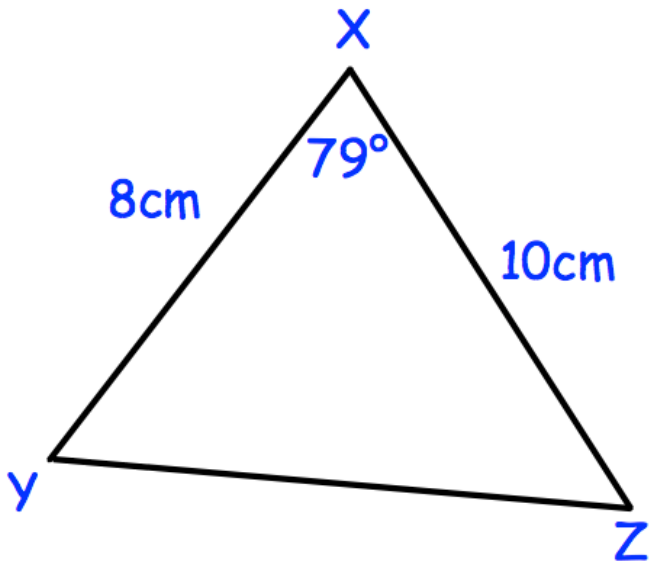


Find the size of x.

.....cm

(3)

7.



XY is 8cm,
XZ is 10cm,
angle YXZ = 79°

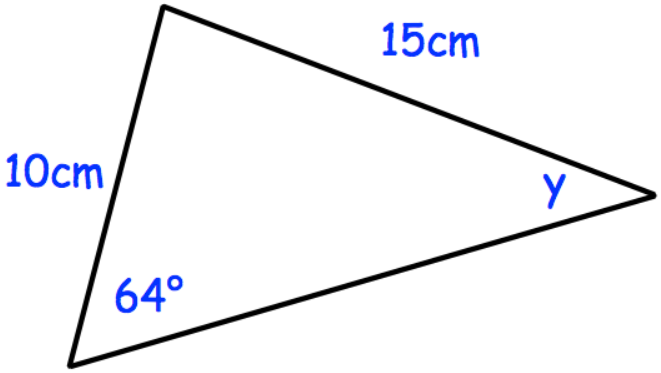
(a) Calculate the area of the triangle XYZ.

.....cm²
(3)

(b) Calculate the length of YZ.

.....cm
(3)

8.

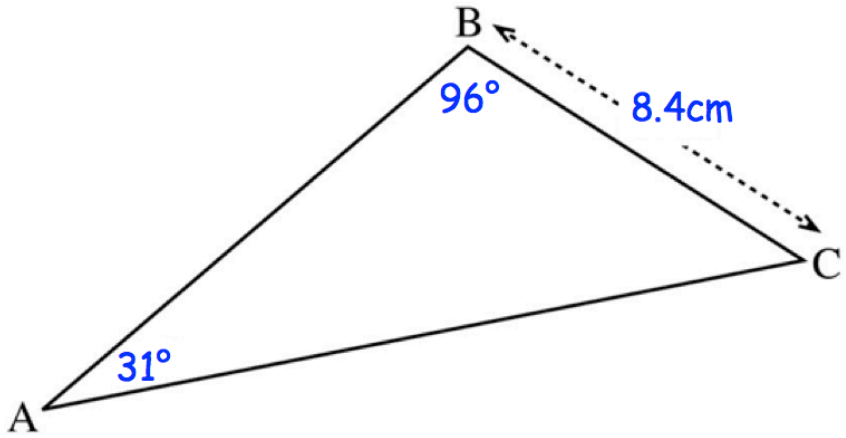


Find the size of y.

.....°

(3)

9.

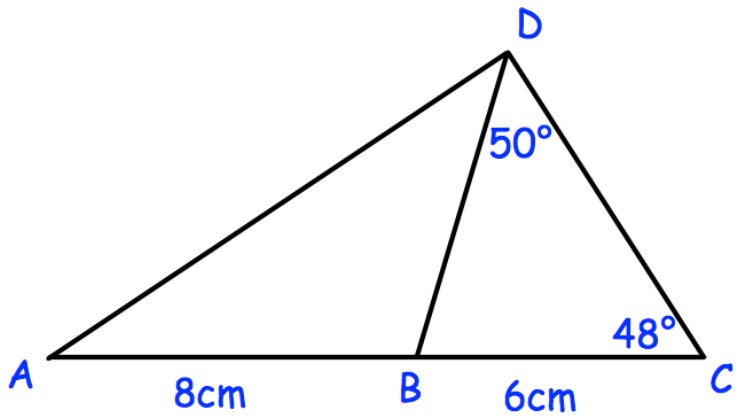


Calculate the length of AB.

.....cm

(3)

10.



ACD is a triangle and B is a point on AC.
AB = 8cm and BC is 6cm.
Angle BCD = 48° and angle BDC = 50°.

(a) Find the length of BD.

.....cm
(3)

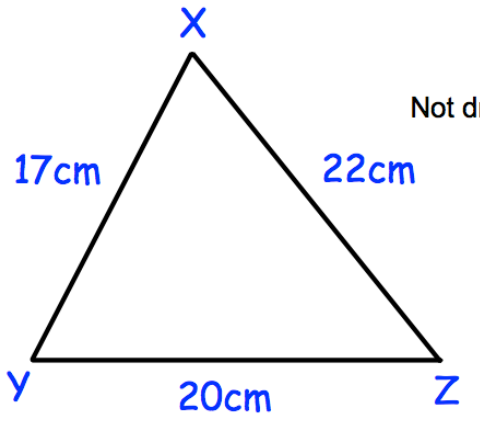
(b) Find the length of AD.

.....cm
(3)

(c) Find the area of triangle ABD.

.....cm²
(3)

11.

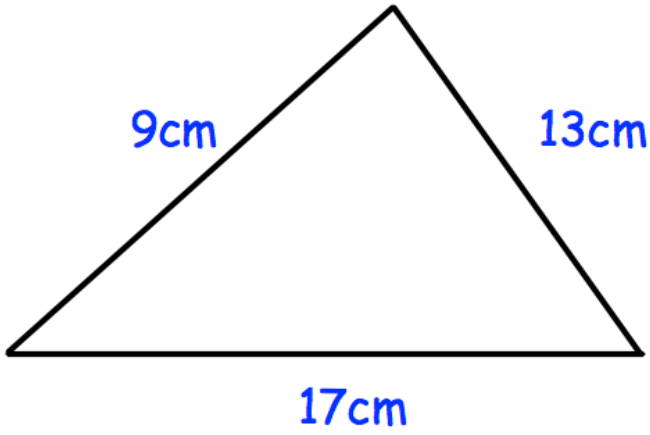


Find the size of angle XZY.

.....°

(3)

12.

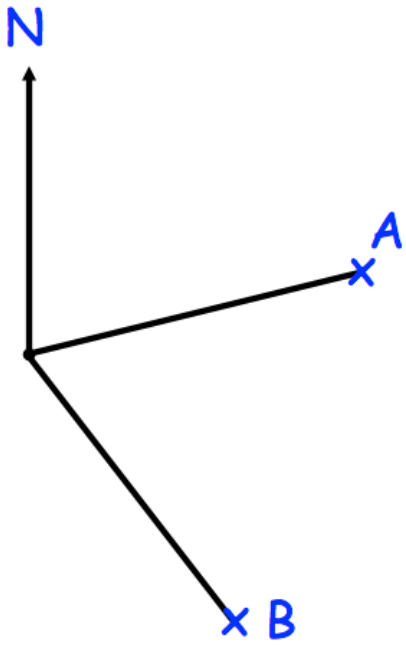


Calculate the smallest angle in the triangle.

.....°

(3)

13.



Two ships, A and B, leave a port at 11:00.
A travels on a bearing of 080° at a speed of 25km/h.
B travels on a bearing of 152° at a speed of 20km/h.

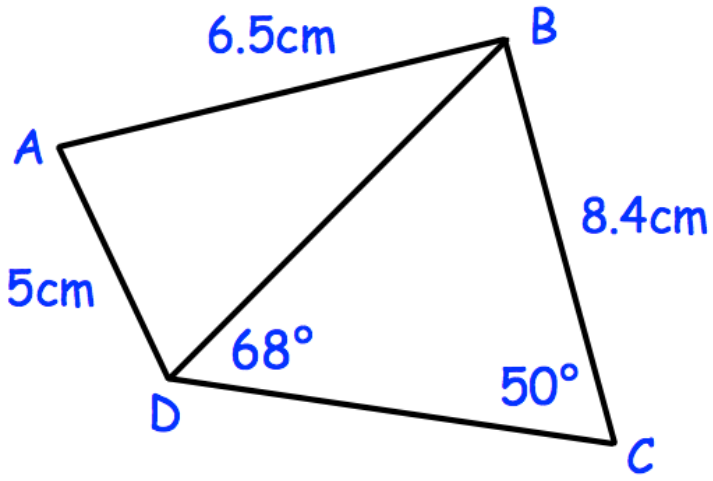
(a) Work out the distance between A and B at 14:00.

.....km
(3)

(b) Work out the bearing of B from A at 14:00.

.....km
(3)

14.

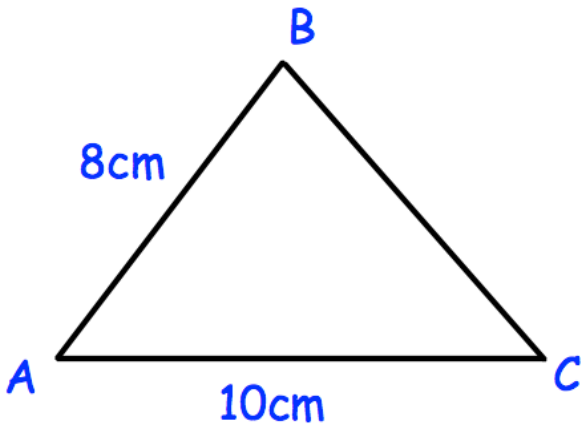


Calculate the size of angle ABD.

.....°

(4)

15.



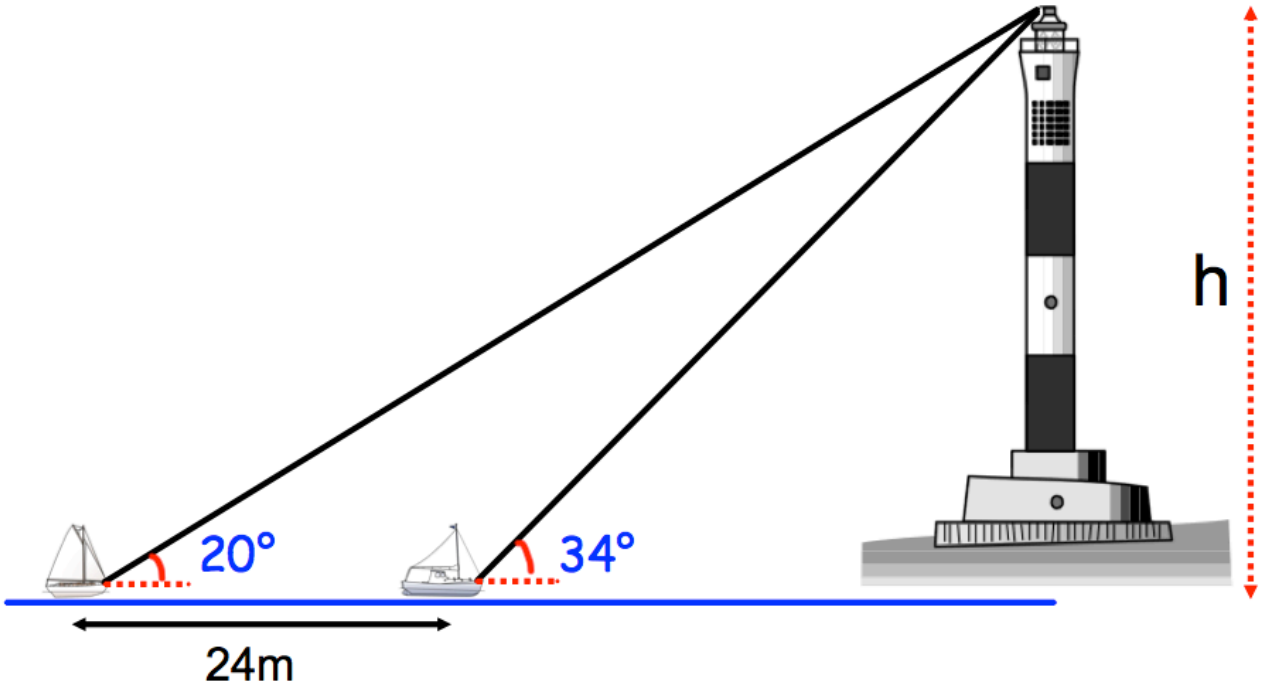
The area of the triangle shown is 25cm².

Calculate the perimeter of the triangle.

.....cm

(4)

16.

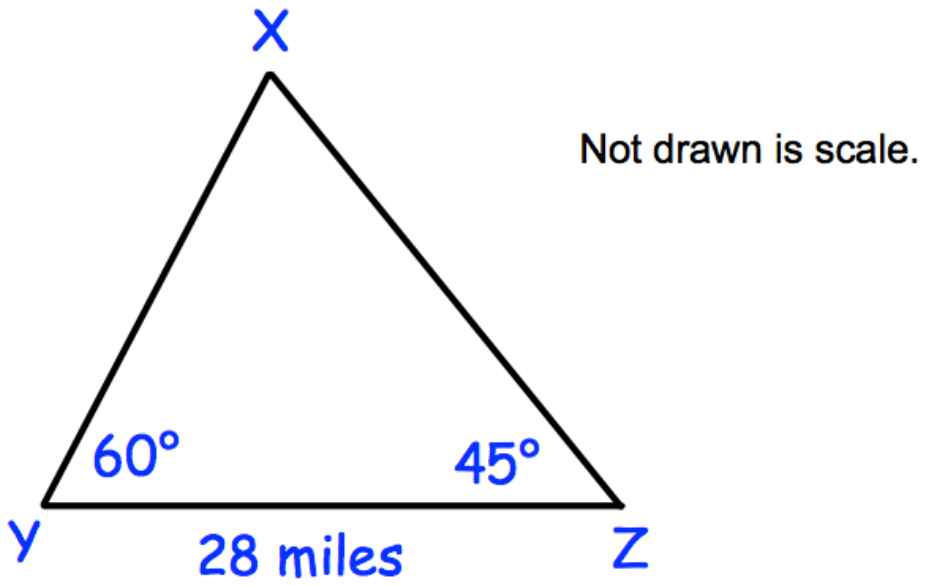


Two small boats are 24m apart.
The angle of elevation of the boats to the top of a lighthouse are 20° and 34° respectively.

Calculate the height of the lighthouse.

.....m
(6)

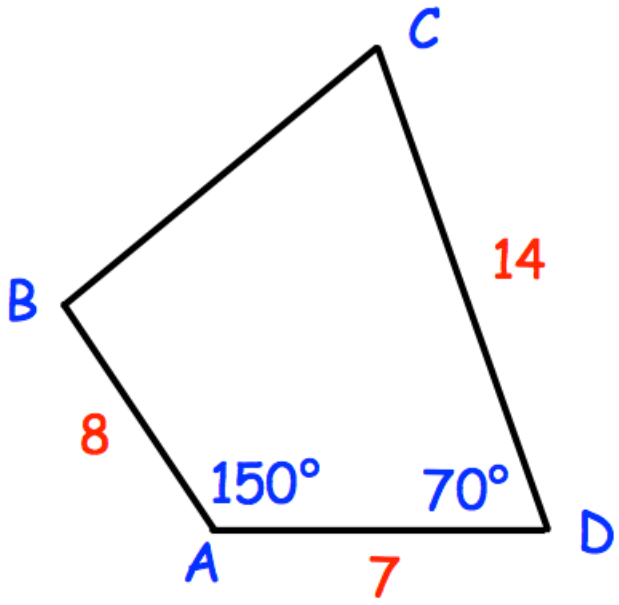
17. A boat, located at position X is running out of fuel.
There are two ports located at Y and Z.
The boat must refuel as soon as possible.



How much closer is the boat to the port at Y than the port at Z?

.....miles
(4)

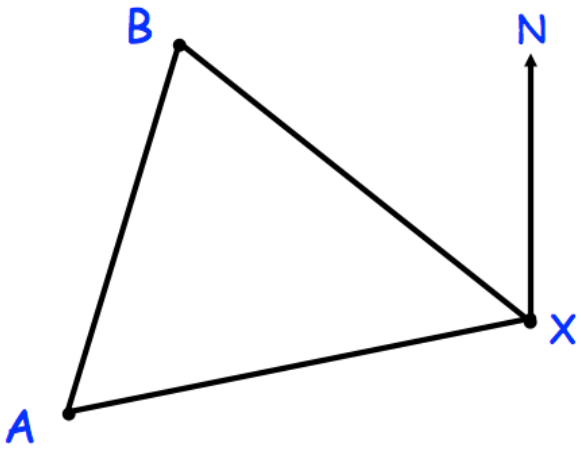
18. In a quadrilateral ABCD, AD = 7cm, AB = 8cm and CD = 14cm.
Angle BAD = 150° and Angle ADC = 70°



Calculate the length BC.

.....cm
(6)

19.



Ship A is 50km from X on a bearing of 258°.
Ship B is 44km from X on a bearing of 312°.

(a) Calculate the distance between A and B.

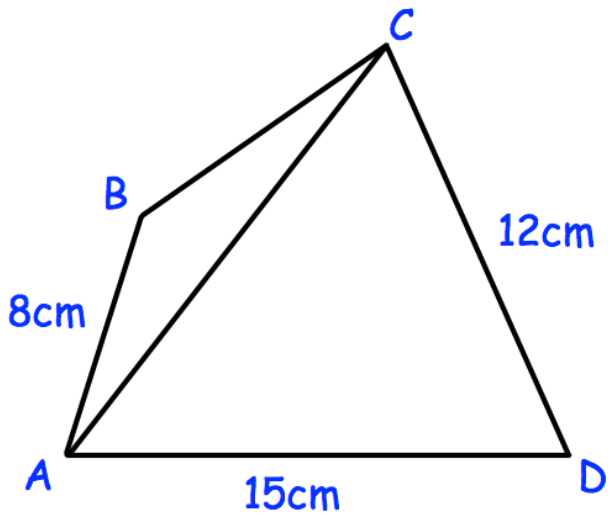
.....km
(3)

(b) Calculate the bearing of A from B.

.....°
(3)

20. ABCD is a quadrilateral.

AB = 8cm, AD = 15cm and CD = 12cm.
Angle ADC = 78° and angle BAC = 20°



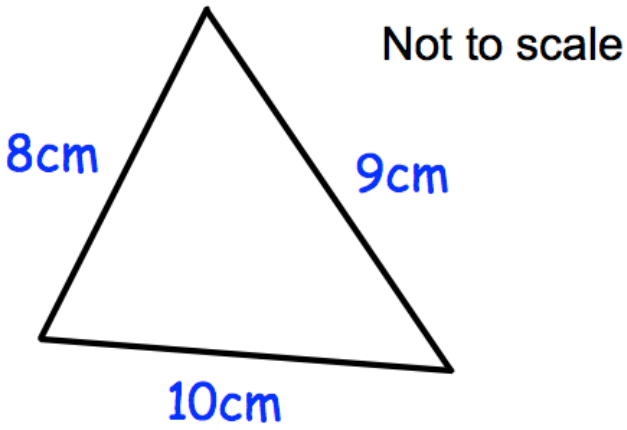
(a) Calculate the length of AC.

.....cm
(3)

(b) Calculate the area of triangle ABC.

.....cm²
(2)

21.



Find the area of the triangle.

.....cm²

(5)