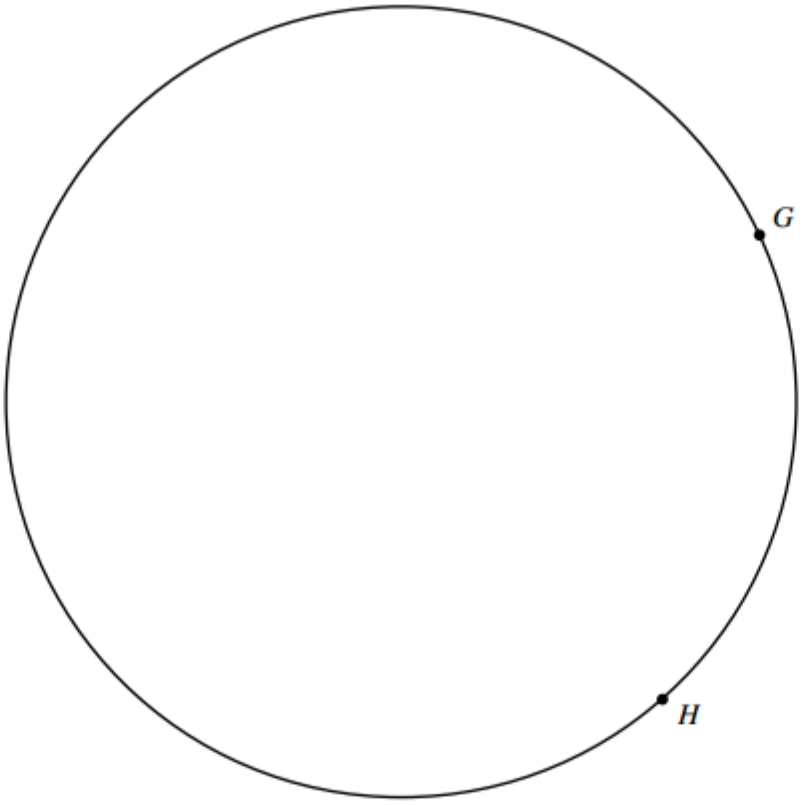
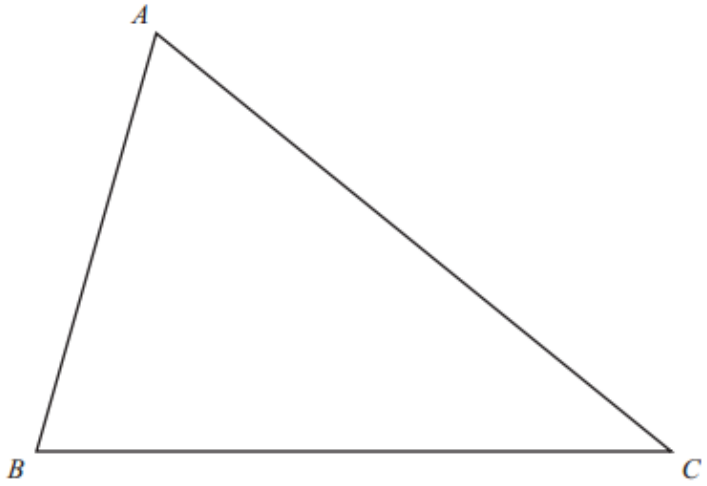
Name
Date Mathematics Grade 10

Question 1



Find, by using **accurate** constructions, the region inside the circle which contains the points more than 5 cm from G **and** nearer to H than to G. Shade this region. [4]

Question 2



(a) In this part of the question use a straight edge and compasses only.

Leaving in your construction lines,

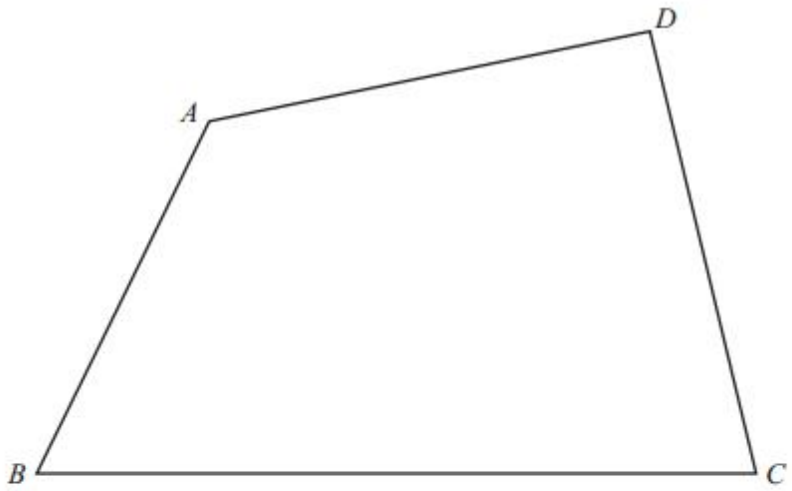
(i) construct the angle bisector of angle ACB, [2]

(ii) construct the perpendicular bisector of AC. [2]

(b) Draw the locus of all the points inside the triangle ABC which are 7 cm from C. [1]

(c) Shade the region inside the triangle which is nearer to A than C, nearer to BC than AC and less than 7 cm from C. [1]

Question 3



The diagram shows a quadrilateral $ABCD$.

(a) Draw the locus of points in the quadrilateral which are 5 cm from A. [1]

(b) Using a straight edge and compasses only, draw the locus of all points inside the quadrilateral which are equidistant from C and D.
Show all your construction lines. [2]

(c) Shade the region which contains points in the quadrilateral that are more than 5 cm from A and nearer to D than to C.
[1]

Question 4

Construct a triangle PQR in which PQ = 5.8 cm, QR = 6.5 cm, PR = 4.5 cm.

Question 5

Construct a right triangle ABC in which $\angle C = 90°$ and $\angle B = 45°$, CB = 5 cm.

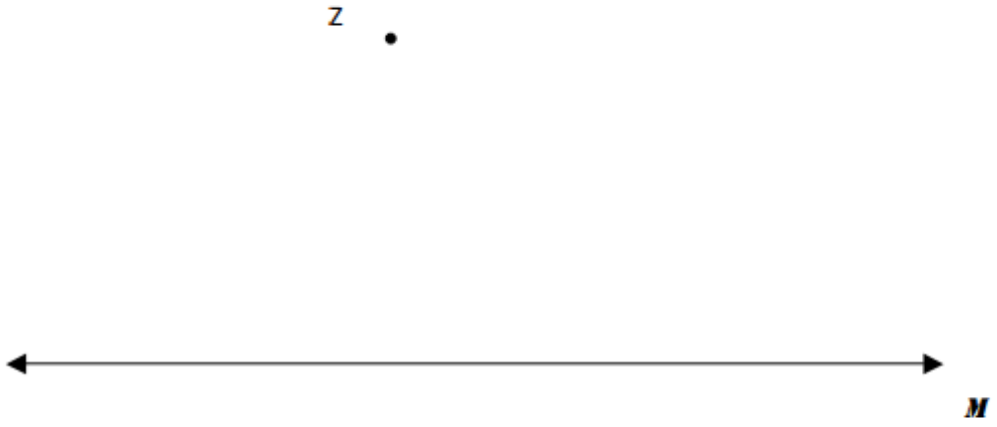
Question 6

Construct an equilateral triangle in which AB = BC = CA = 6 cm. What is the measure of its each angle?

Question 7

Perpendicular through a point not on the line

Show your construction below. Be sure to leave your marks to show that you actually did the construction.



Question 8

In the triangles below, construct inscribed and circumscribed circles