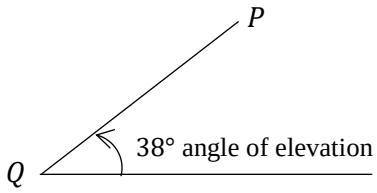
Question 1

Two angles x and y are complementary. If $x = 35°$, what is the value of y?

[401/1:2014]

Question 2

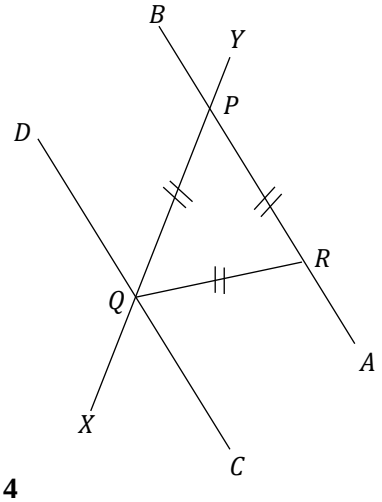
If the angle of elevation of P from Q is 38°, then the angle of depression of Q from P is …



[401/1: 1991]

Question 3

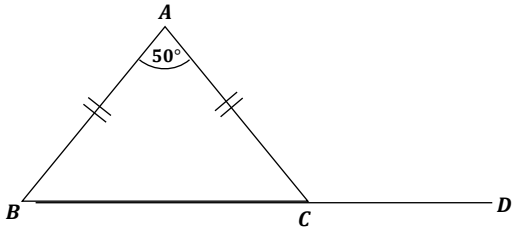
In the diagram below lines AB and CD are parallel. The line XY crosses AB and CD at P and Q respectively. R is on AB such that $QR = RP = QP$, find angle DQY. *[401/1:2015]*



Question 4

In the diagram below BCD is a straight line angle, $BAC = 50°$ and $AB = AC$. Find angle ACD.

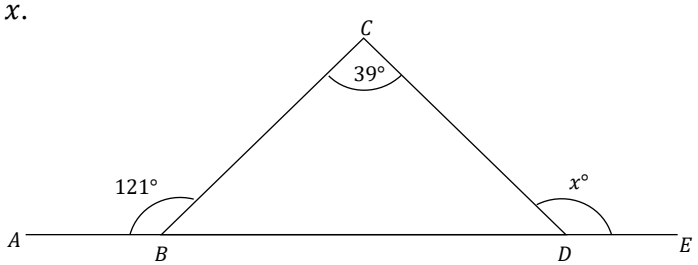
[401/1:2015]



Question 5

In the diagram below angle $ABC = 121°$ angle $BCE = 39°$ and $ABDE$ is straight line. Find the value of x.

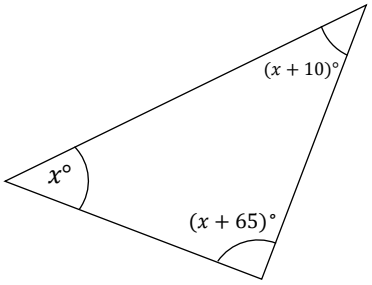
[401/1:2014]



Question 6

The angles of triangle ABC are shown in the diagram below. Calculate the value of x.

[401/2:2016]



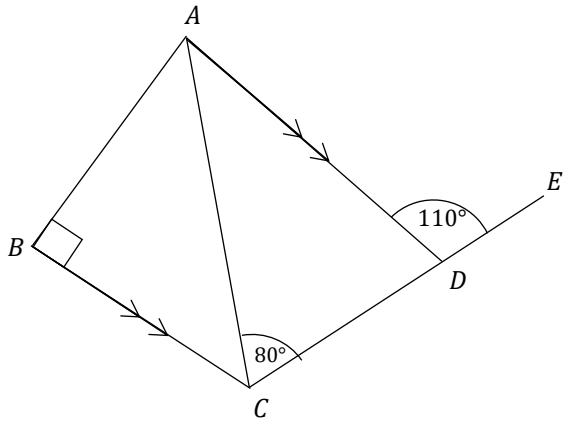
Question 7

In the diagram below AD is parallel to BC. Angle $ABC = 90°$, angle $ADE = 110°$ and angle $ACD = 80°$.

[401/2:2015]

(a) Find the size of angle ACB

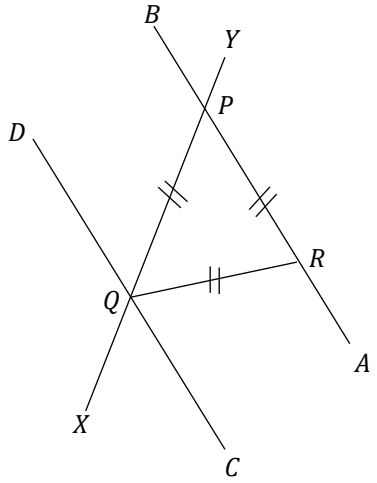
(b) Find the size of angle BAC



Question 8

In the diagram below lines AB and CD are parallel. The line XY crosses AB and CD at P and Q respectively. R is on AB such that $QR = RP = QP$, find angle DQY.

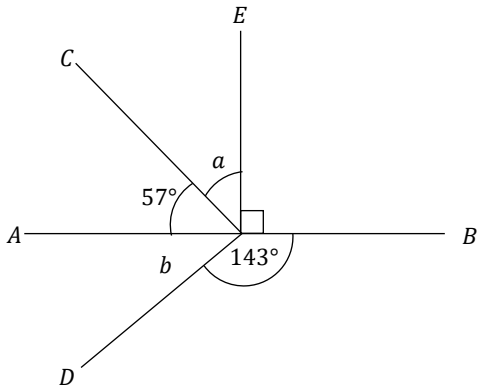
[401/1:2015]



Question 9

In the diagram below AOB is a straight line, $\sphericalangle BOD = 143°$, $\sphericalangle AOC = 57°$ and $\sphericalangle BOE$ is a right angle. Find the sum of angles a and b.

[401/1:2016]



Question 10

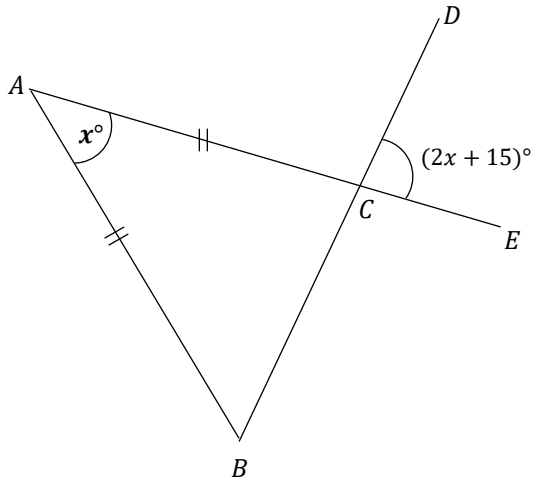
If $x°$ and $(3x - 2)°$ are complementary angles, find the value of x.

[401/1:2017]

Question 11

In the diagram below ACE and BCD are straight lines, $AB = AC$, angle $BAC = x°$ and angle $DCE = (2x + 15)°$. Find the value of x.

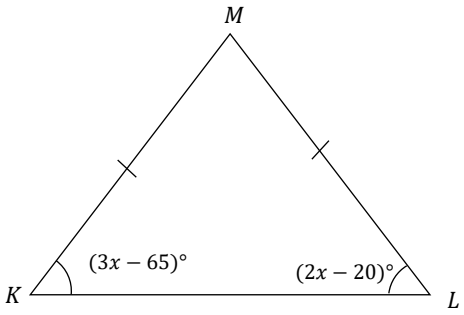
[401/2:2017]



Question 12

In the diagram below $KM = ML$, angle $MKL = (3x - 65)°$ and angle $MLK = (2x - 20)°$. Calculate x.

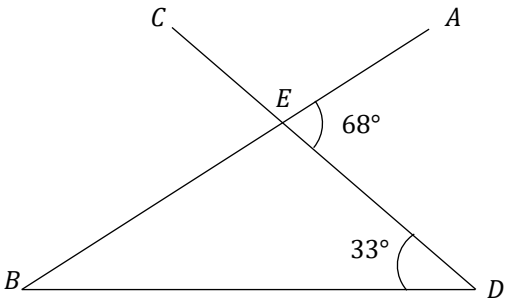
[401/2: 2019]



Question 13

In the diagram below AB and CD are straight lines meeting at E angle $AED = 68°$ angle $DE = 33°$. Find the size of angle ABD.

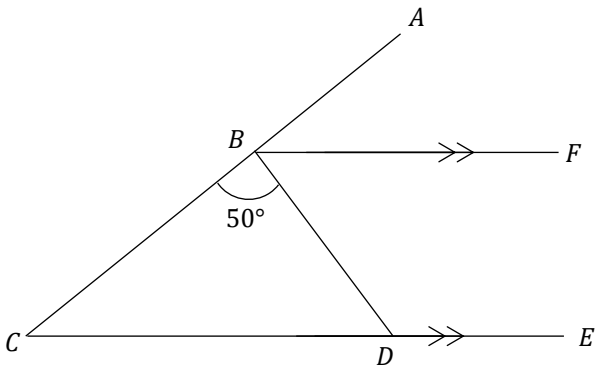
[401/1:2018]



Question 14

In the figure below BF is parallel to CE, BF bisects angle ABD and angle $CBD = 50°$. Calculate the size of angle BDE.

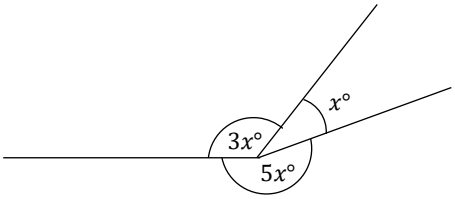
[401/1: 2019]



Question 15

Find the value of x in the figure below.

[401/1: 2020]



Question 16

In the diagram below triangle ABC is an isosceles and triangle BCD is an equilateral. Angle $BAC = 40°$. Find angle ABD.