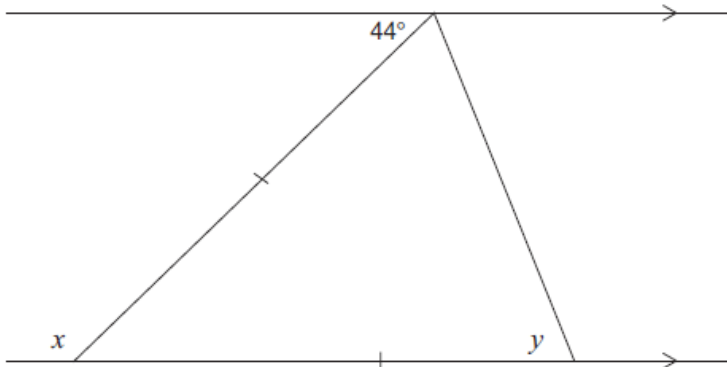


# Geometry Review

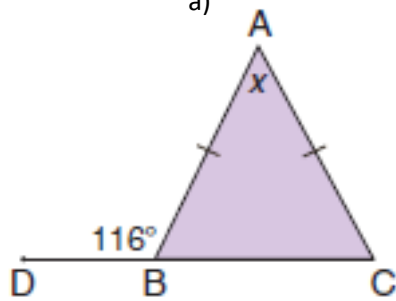
MPM1D

1. Find the values of  $x$  and  $y$  in the diagram below.

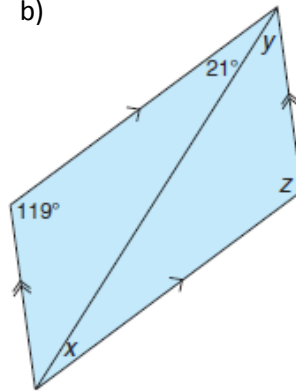


2. Find the value of the missing angles (by solving for unknown variables) in each sketch below.

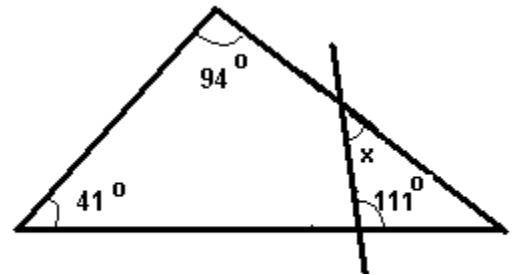
a)



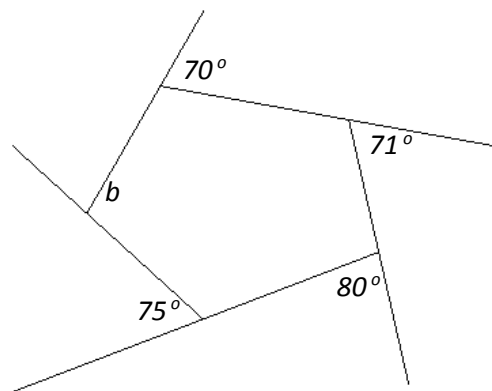
b)



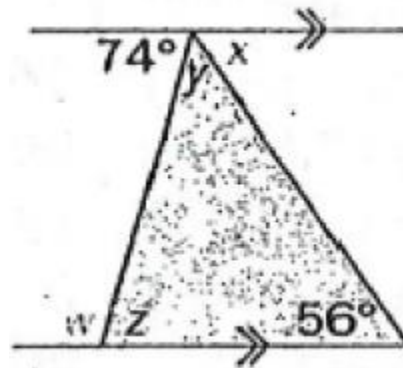
c)

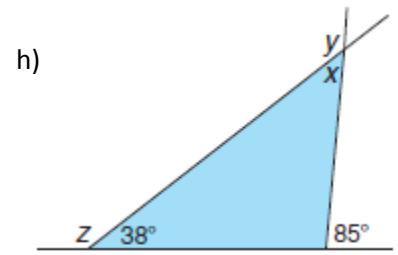
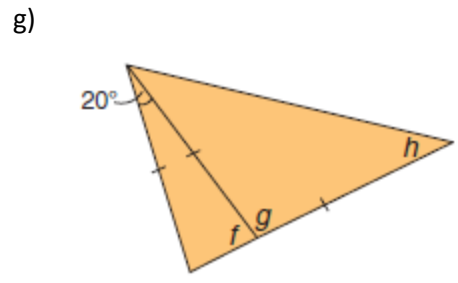
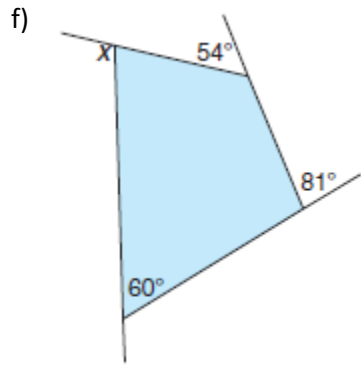


d)

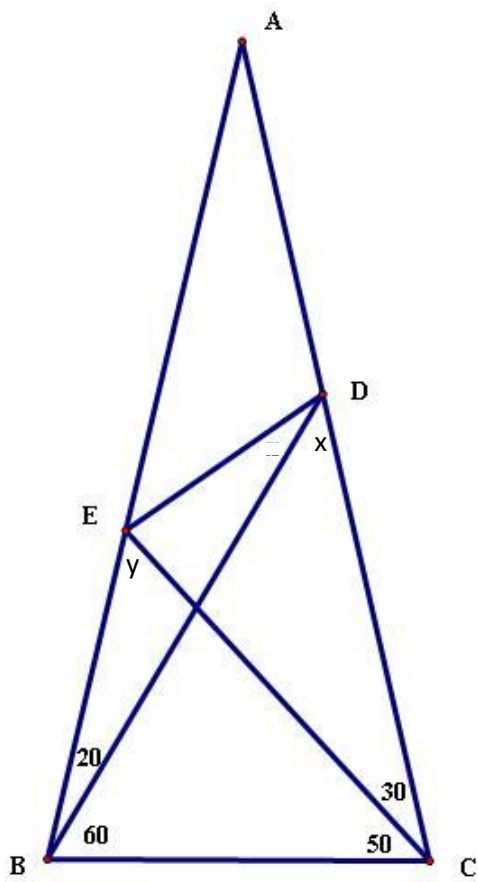


e)

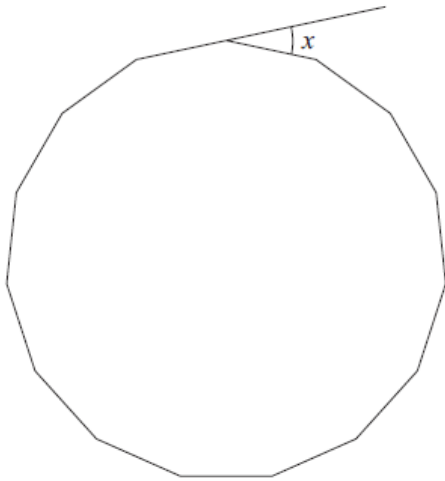




3. Determine the value of angle  $x$  in the diagram below.

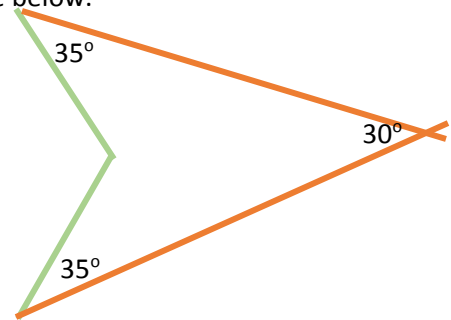


4. The following figure is a 15-sided regular polygon.



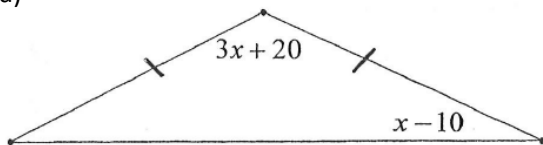
What is the value of  $x$  shown in the diagram?

5. Calculate the unknown interior angle in the shape below.

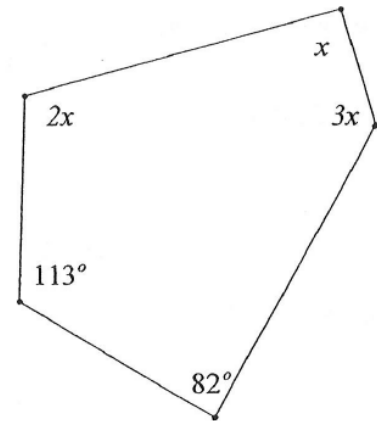


6. Solve for  $x$  in each diagram below.

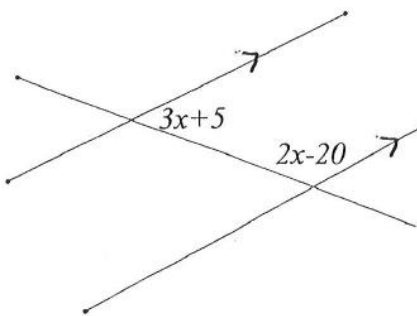
a)



b)

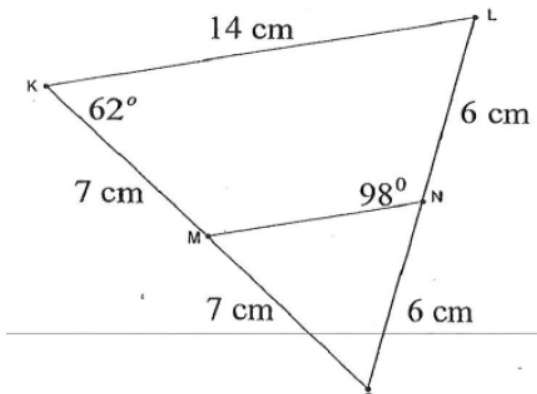


c)

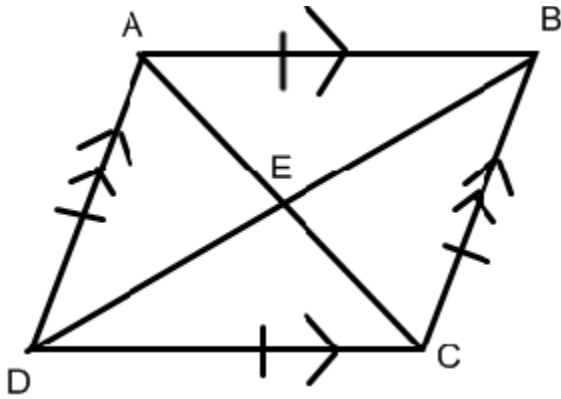


7.

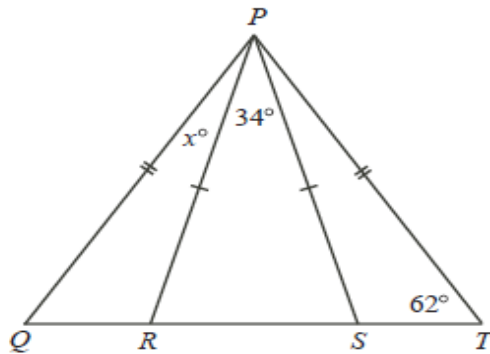
Find the measures of  $\angle KMN$ ,  $\angle KLN$ ,  $\angle NMO$ ,  $\angle KOL$  and the length of  $MN$ . Justify your reasoning.



8. Examine the figure below. What type of quadrilateral is ABCD? If  $\angle ABC = 64^\circ$  then solve for  $\angle BAE$  and  $\angle DCE$ . Justify your solution.



9. Find the value of  $x$ .



**ANSWERS**

1.  $x = 136, y = 68$
2. a)  $x = 52^\circ$  b)  $z = 119, x = 21, y = 40$  c)  $x = 24$  d)  $b = 116$  e)  $w = 106, z = 74, y = 50, x = 56$  f)  $x = 105$  g)  $f = 80, g = 100, h = 40$
3.  $x = 40, y = 47$  4.  $x = 24$  5.  $260^\circ$  6. a)  $x = 36$  b)  $x = 57.5$  c)  $x = 39$
7.  $\angle KMN = 118^\circ, \angle KLN = 82^\circ, \angle NMO = 62^\circ, \angle KOL = 36^\circ, MN = 7\text{cm}$  8. Rhombus.  $\angle BAE = 58^\circ, \angle DCE = 58^\circ$  9. 11