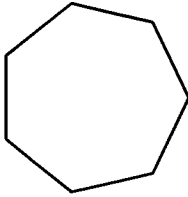


Geometry Chapter 5 Practice Test

Name _____ Period _____ Date _____

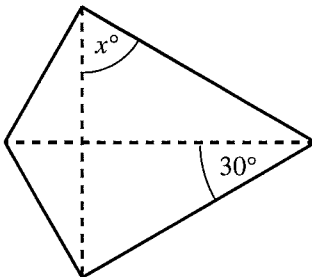
For full credit, state the Theorem or rule you used to find your answer.

1. How many triangles are formed by drawing diagonals from one vertex in the polygon? What is the sum of the measures of the angles in the polygon?



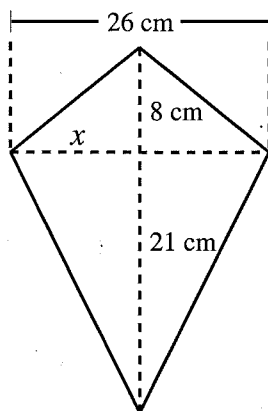
- [A] 5; 1080° [B] 6; 1080° [C] 6; 900° [D] 5; 900°

2. Find the number of sides of a convex polygon if the measures of its interior angles have a sum of 2340° .
3. How many sides does a regular polygon have if the measure of each exterior angle is equal to 30° ?
4. The figure below is a kite.



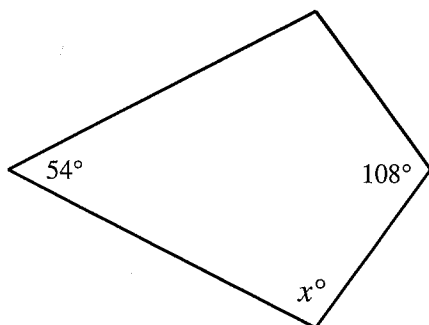
What is the value of x ?

5. The dashed lines inside the figure are the diagonals of a kite.



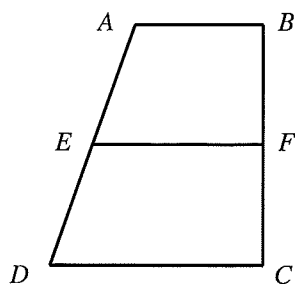
What is the value of x ?

6. The figure shown is a kite.

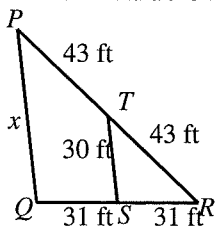


What is the value of x ?

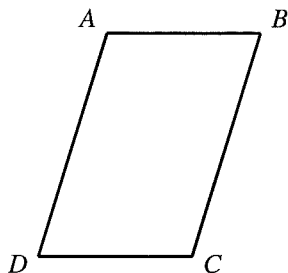
7. Trapezoid $ABCD$ contains midsegment \overline{EF} . If $AB = 6$ inches and $EF = 8$ inches, find the length of \overline{DC} .



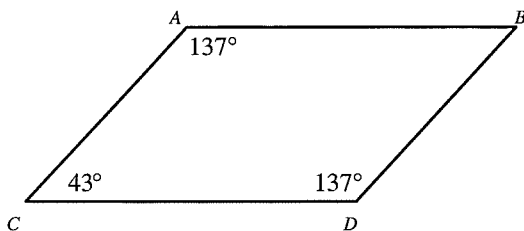
8. Find the value of x . [A] 37 ft [B] 30 ft [C] 31 ft [D] 60 ft



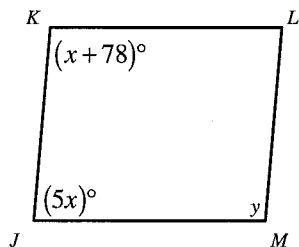
9. $ABCD$ is a parallelogram. If $m\angle CDA = 72^\circ$, find $m\angle DAB$.



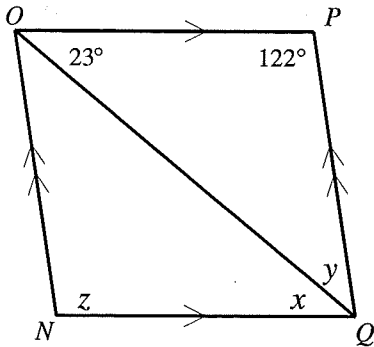
10. Tell whether the quadrilateral is a parallelogram. Explain your reasoning.



11. Find the value of y using the parallelogram below.

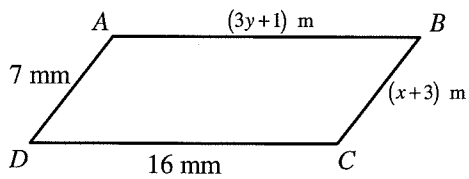


12. Find the value of the variables in the parallelogram.

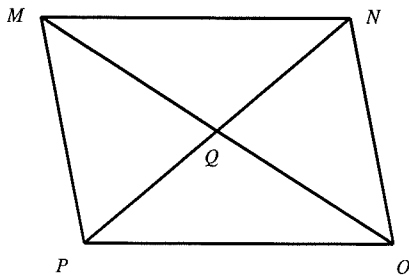


- [A] $x = 11.5^\circ$, $y = 61^\circ$, $z = 157^\circ$ [B] $x = 35^\circ$, $y = 23^\circ$, $z = 122^\circ$
 [C] $x = 61^\circ$, $y = 11.5^\circ$, $z = 157^\circ$ [D] $x = 23^\circ$, $y = 35^\circ$, $z = 122^\circ$

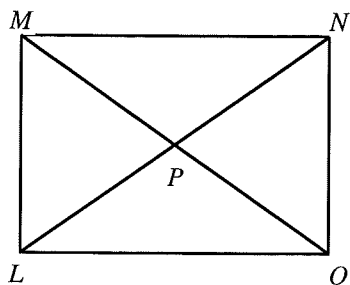
13. Find the value of x and y given figure $ABCD$ is a parallelogram.



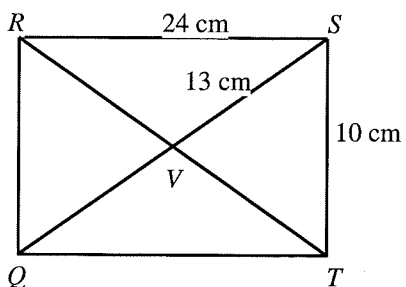
14. In the parallelogram below, $QN = 15$ inches, $NO = 20$ inches, and $PO = 27$ inches. Find the perimeter of $\triangle NMP$.



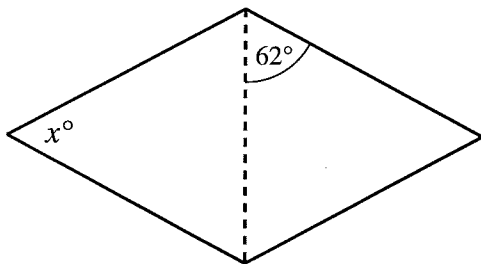
15. This is a rectangle. If $OP = 12$ inches, what is the length of \overline{LN} ?



16. Find the perimeter of $\triangle TVQ$, given $QRST$ is a rectangle.

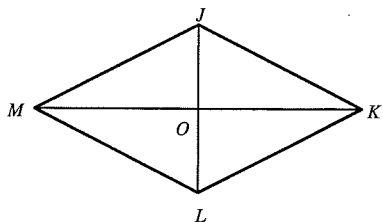


17. The dashed line is one of the diagonals of the rhombus.

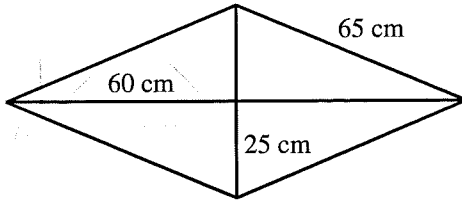


What is the value of x ?

18. $MJKL$ is a rhombus. If $m\angle MJK = 126^\circ$, what is the measure of $\angle JKM$?



19. The figure below is a rhombus.



What is the total length of the perimeter and both diagonals of the rhombus?

20. When his family had a rummage sale, Marvin sold soda pop. When only one-fifth of the soda pop was left, he put 21 more cans in the cooler. After that Marvin sold 20 cans. At the end of the day, 6 cans of soda pop were left. How many cans were in the cooler at the beginning of the sale?
21. Write a paragraph or two-column proof to show that the diagonals of a square are congruent. Use the diagram and labels to set up what is given and what is to be shown.

