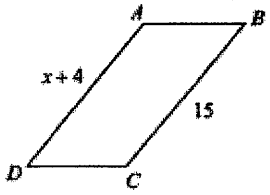
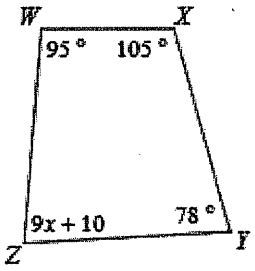
Quadrilaterals and Polygons REVIEW Name_____ Date_____Period____

Solve for x. The figure below is a parallelogram:

1.

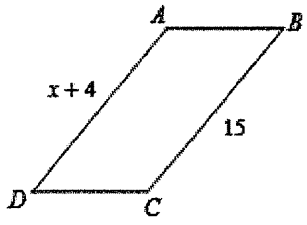


2.

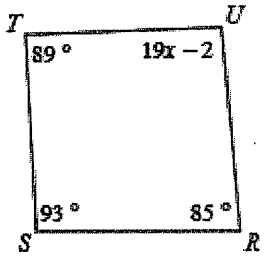


Solve for x. The figure below is a parallelogram:

3.

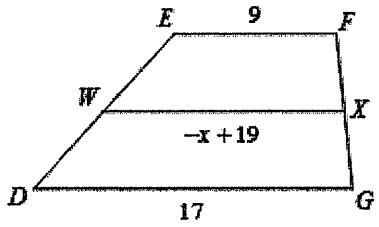


4.



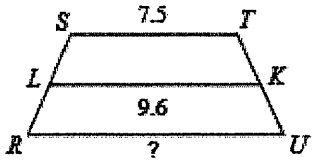
Solve for x. The figure below is a trapezoid:

5.



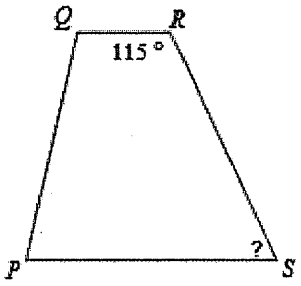
Find the length of the base indicated by the trapezoid

6.



Find the measurement of the missing angles indicated for each trapezoid

7.



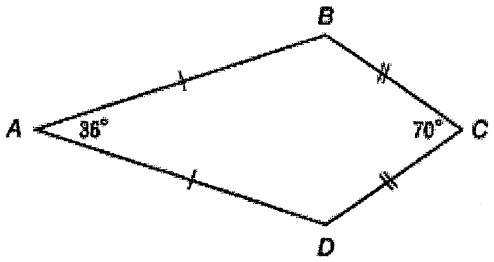
$m\angle S$ _____

$m\angle Q$ _____

$m\angle P$ _____

Find the indicated angle measures:

8.

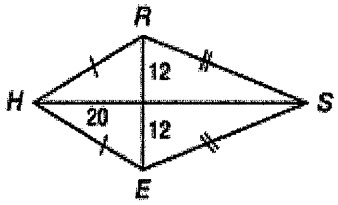


$m\angle B$ _____

$m\angle D$ _____

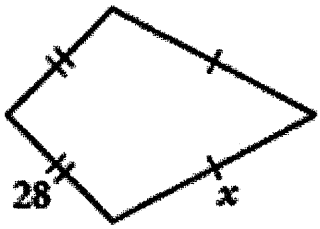
Find the indicated side lengths of the kite below:

9.



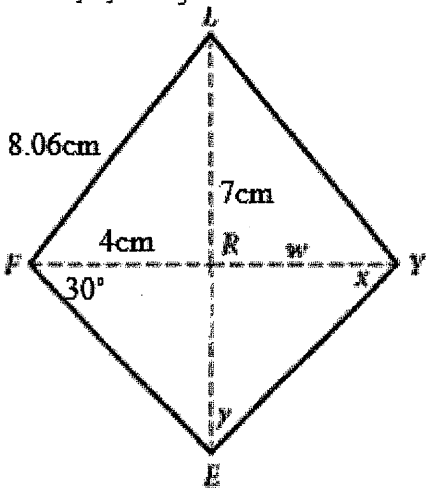
$RH =$ _____

10. The perimeter of this kite is **116**. Find x.

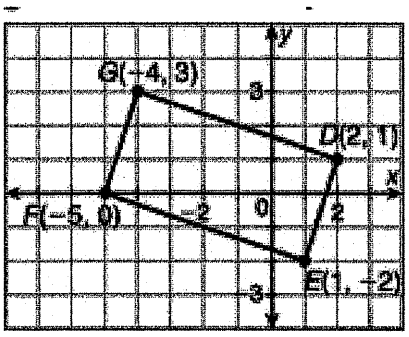


11.

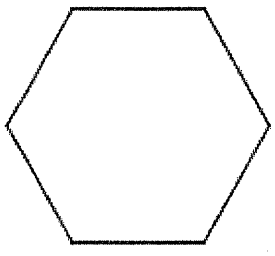
FLYE is a kite with FL = LY.
Find w, x, and y.



12. Use distance and slope to verify whether parallelogram below is a rectangle, rhombus, or a square.



13. Find the measure of one interior angle in each polygon. Round your answer to the nearest tenth if necessary.



14. If the sum of the interior angles is 2340°, find the number of sides for the polygon.

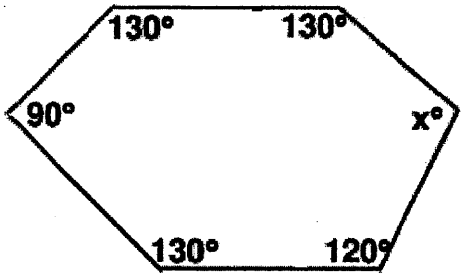
15. If each of the exterior angles is 30°, find the number of sides for the polygon

16. If each of the interior angles is 135°, find the number of sides for the polygon

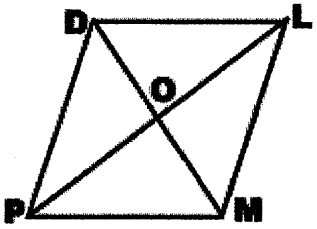
17. Find the other endpoint of the line segment with the given endpoint and midpoint.

Endpoint: (8, -8), midpoint: (5, 3)

18. Solve for x:



19. In rhombus DLMP, DM = 24, m∠LDO = 43°, and DL = 13. Find each of the following.



a) OM = _____

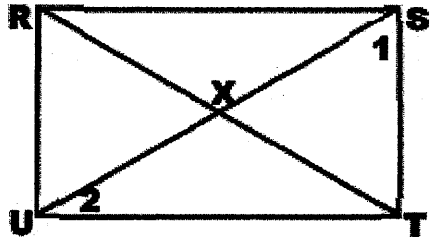
b) m∠DOL = _____

c) m∠DLO = _____

d) m∠DML = _____

e) DP = _____

20. Use the following rectangle for parts a and b

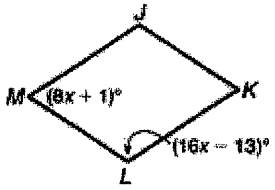


a) m∠1 = 54°, find m∠2.

b) If XT = 2y – 3 and US = 32, solve for y.

21.

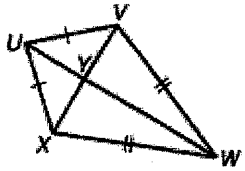
In $\square JKLM$, what is the value of $m\angle K$?



F 15°
H 65°
G 57°
J 115°

22.

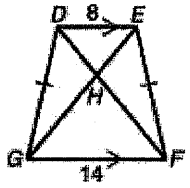
In kite $UVWX$, $m\angle XUV = 84°$, and $m\angle WVX = 68°$. What is $m\angle VWX$?



F 22°
H 44°
G 42°
J 45°

23.

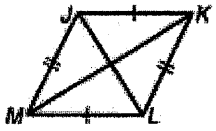
$GE = 5x + 2$ and $DF = 8x - 7$.
What is GE?



A 16
B 17
C 18
D 19

24.

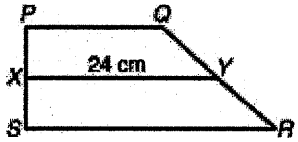
What additional information would allow you to conclude that $JKLM$ is a rhombus?



F $\overline{JK} \parallel \overline{ML}$ and $\overline{JM} \parallel \overline{KL}$.
G $\overline{JM} \cong \overline{JK}$
H $\overline{JL}$ and $\overline{MK}$ bisect each other.
J $\overline{JL} \cong \overline{MK}$

25.

In trapezoid $PQRS$, if $\overline{YX}$ is the midsegment, what could be the lengths of $\overline{PQ}$ and $\overline{SR}$?



F 4 cm and 8 cm
G 9 cm and 15 cm
H 17 cm and 31 cm
J 18 m and 30 m

26.

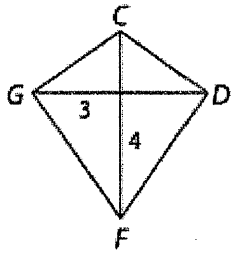
Which is the best name for the quadrilateral with vertices at (2, 2), (5, −2), (1, −5), and (−2, −1)?

A parallelogram
C rhombus
B rectangle
D square

If *CDFG* is a kite, find each measure.

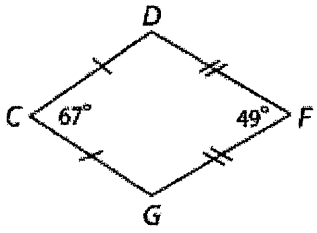
27.

GF



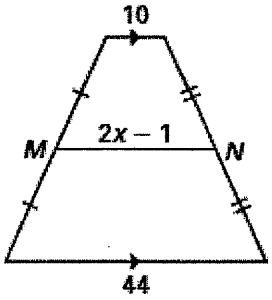
28.

$m\angle D$

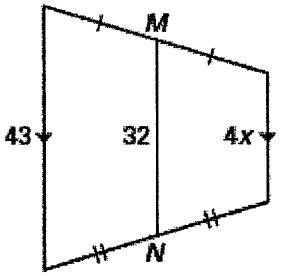


Find the value of x:

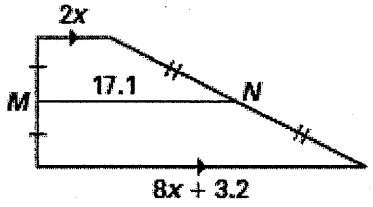
29.



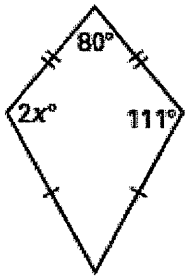
30.



31.



32.



WXYZ is a square. If $WT = 3$, find each measure.

33.

a) $m\angle WYX =$ _____

b) YZ = _____

c) $m\angle WTZ =$ _____

d) XZ = _____