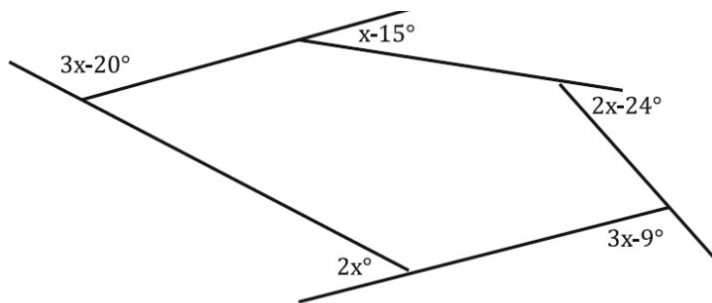


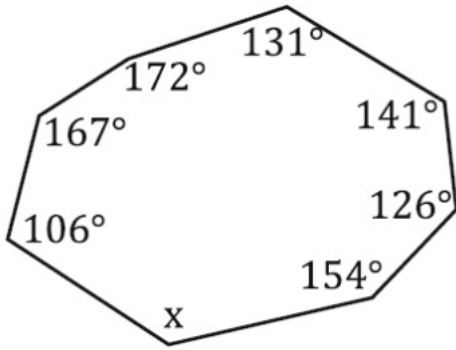
Name \_\_\_\_\_ Per. \_\_\_\_\_ Date \_\_\_\_\_  
Geometry Ch. 6 Practice Test

**Answer questions 1-5 based on the information given.  
Show equations and setups, box your final answer.**

1. What is the sum of the interior angles of a decagon?
2. What is the measure of one exterior angle of a regular 12-gon?
3. What is the measure of one interior angle of a regular heptagon?
4. Find the value of  $x$ .

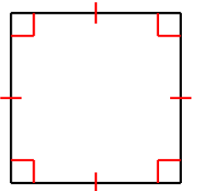
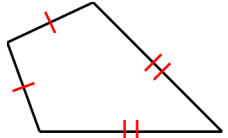
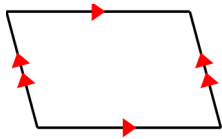
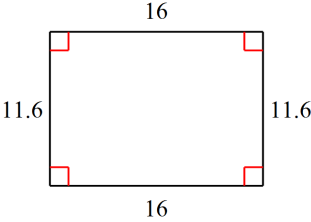
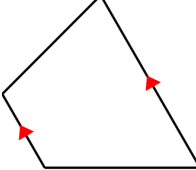
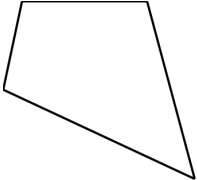


5. Find the measure of the missing angle.



For # 6-11, using the definitions that you know:

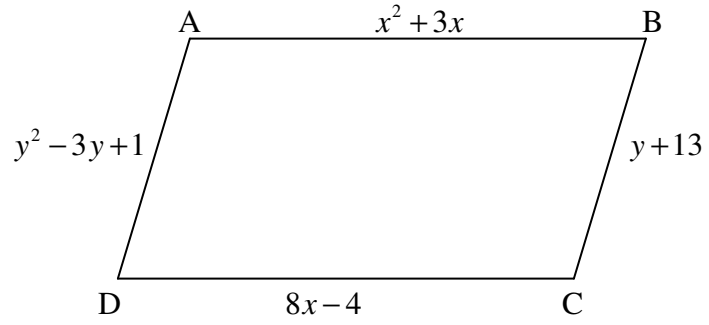
- Classify each of the figures below as a(n): *trapezoid*, *isosceles trapezoid*, *parallelogram*, *rectangle*, *rhombus*, *square* or *kite*. Write the name of the quadrilateral below the figure. There is only one correct answer for each figure.
- Give a reason for your answer.

 <p>6. _____</p>	 <p>7. _____</p>	 <p>8. _____</p>
 <p>9. _____</p>	 <p>10. _____</p>	 <p>11. _____</p>

12. Use  $\square ABCD$  to find  $x$  and  $y$ .

$x =$  \_\_\_\_\_

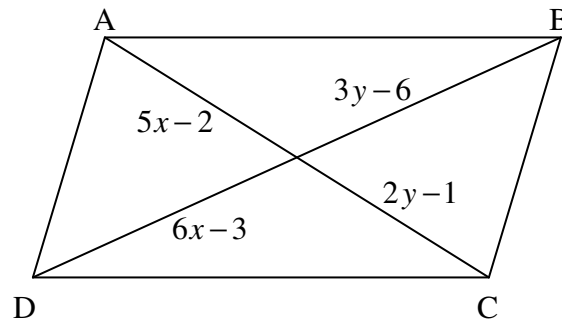
$y =$  \_\_\_\_\_



13. Use  $\square ABCD$  to find  $x$  and  $y$ .

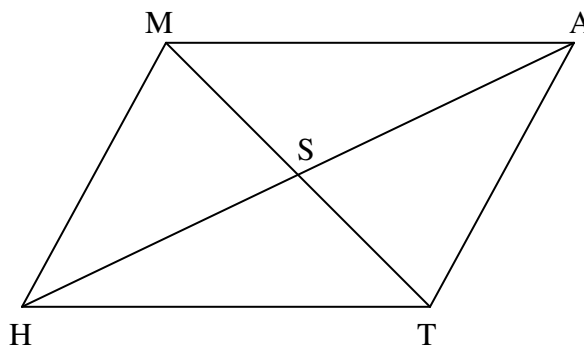
$x =$  \_\_\_\_\_

$y =$  \_\_\_\_\_



For problems 14-15, complete each statement about  $\square$  MATH.

14.  $\overline{MA} \cong$  \_\_\_\_\_

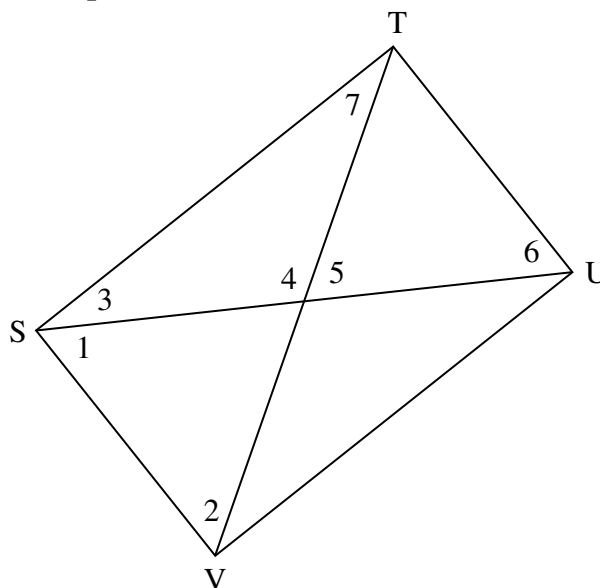


15.  $\angle MAT$  is supplementary to \_\_\_\_\_

Use rectangle STUV and the given information for problems 16-17.

16.  $m\angle 7 = 36$ , find  $m\angle 2$

$m\angle 2 =$  \_\_\_\_\_

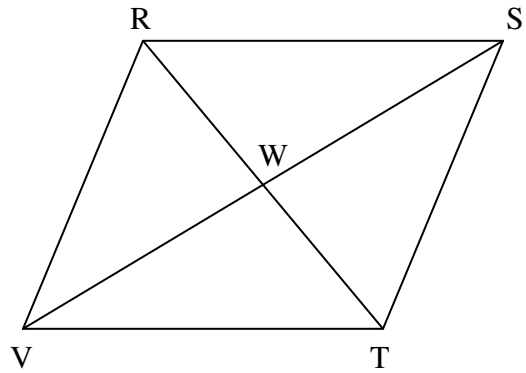


17.  $m\angle 1 = x + 41$ ,  $m\angle 2 = 3x + 15$ ,  
Find  $x$  and  $m\angle 6$ .

$x =$  \_\_\_\_\_

$m\angle 6 =$  \_\_\_\_\_

Quadrilateral RSTV is a rhombus. Use the figure and information for problems 18-19.



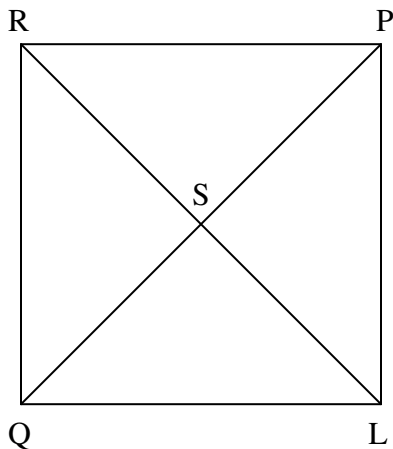
18.  $SV = 16$ ,  $ST = 14$ , Find WT. (Leave your answer in simplified square root form)

WT = \_\_\_\_\_

19.  $m\angle VRT = 2x + 45$ ,  $m\angle RTV = x^2 + 5x + 5$ , Find  $x$ .

$x =$  \_\_\_\_\_

Use square QRPL for problems 20-21 to find  $x$ .



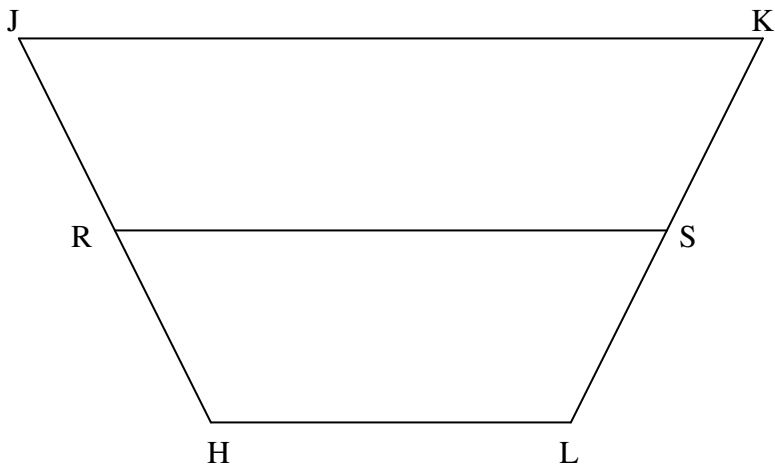
20.  $RL = 11x + 2$   
 $QP = 6x + 37$

$x =$  \_\_\_\_\_

21.  $m\angle RSQ = 4x + 2$

$x =$  \_\_\_\_\_

Use isosceles trapezoid  $HJKL$  with median  $\overline{RS}$  for problems 22-23.



22. If  $HL = 9$  and  $JK = 27$ , Find  $RS$ .

$RS =$  \_\_\_\_\_

23. If  $JK = 7x - 7$ ,  $RS = 11$ , and  $HL = x + 5$ , Find  $x$ .

$x =$  \_\_\_\_\_

For problems 24-28, fill in the blank for each statement with **ALWAYS**, **SOMETIMES**, or **NEVER**.  
(Each of these is worth 1 point each.)

24. A rectangle is \_\_\_\_\_ a rhombus.

25. Diagonals of a parallelogram are \_\_\_\_\_ congruent.

26. A square's diagonals are perpendicular but are not congruent. \_\_\_\_\_

27. Diagonals of a rectangle \_\_\_\_\_ bisect each other.

28. Diagonals of a parallelogram \_\_\_\_\_ bisect the opposite angles.