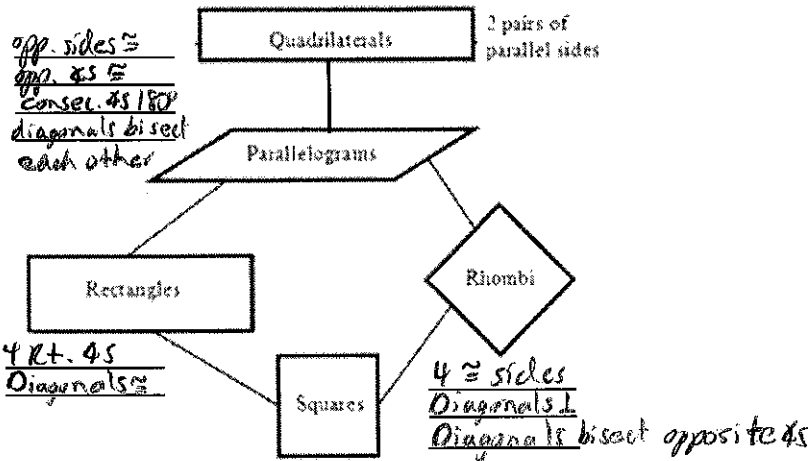


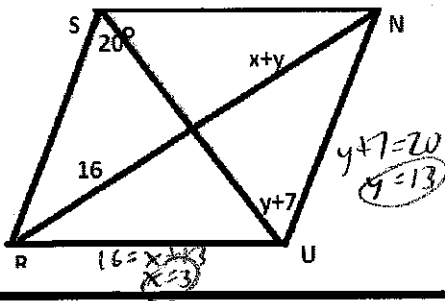
Name: Key Date: \_\_\_\_\_

1. List the properties of each of the following shapes:

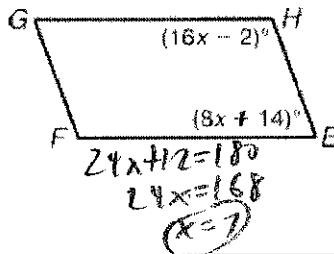


Find the missing variable for the following parallelograms.

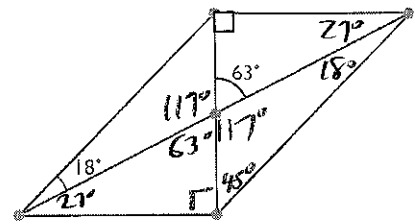
3. Find  $x$  and  $y$ .



4. Find  $x$ .

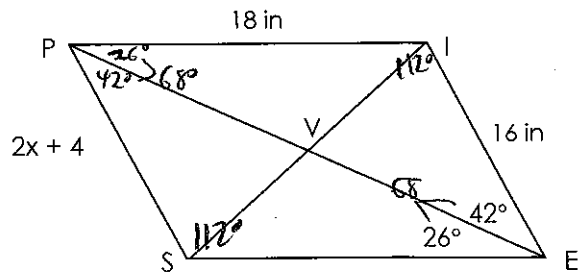


5. Find the missing angles.



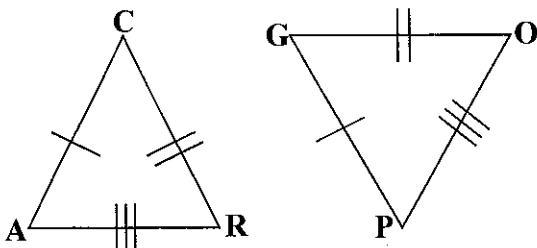
Refer to parallelogram PIES below.

6.  $x = \underline{6}$
7.  $m\angle PIE = \underline{112^\circ}$
8.  $m\angle IPS = \underline{68^\circ}$
9.  $m\angle SPV = \underline{42^\circ}$
10. If  $PV = 20$ , then  $PE = \underline{40}$

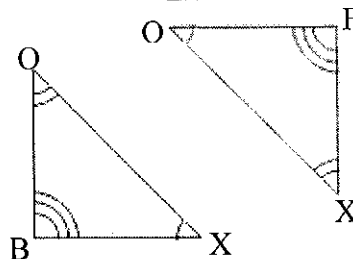


Write the congruence statement for each pair of triangles.

11.  $\triangle RAC \cong \triangle OPG$



12.  $\triangle FOX \cong \triangle BXO$



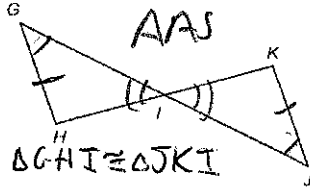
**Congruent Triangles:**

Determine whether each pair of triangles is congruent (SSS, SAS, ASA, AAS, or HL). If not, write not congruent. If they are congruent, write a congruence statement.

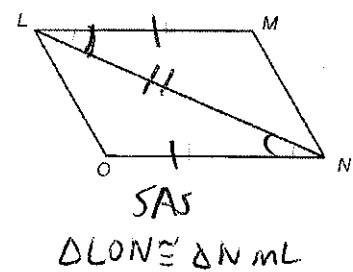
13.



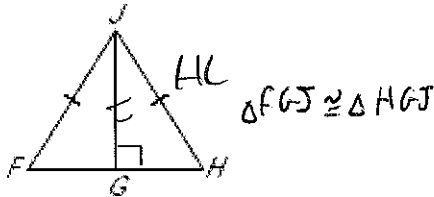
14.



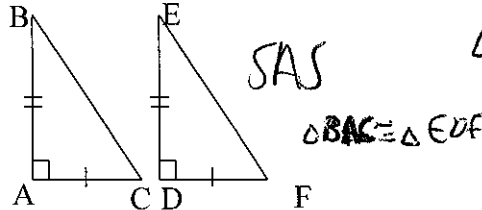
15.



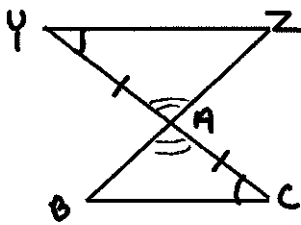
16.



17.

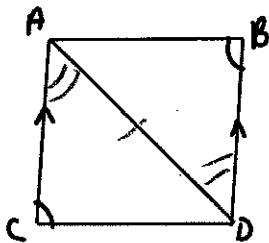


18. Complete the following proof:



Statement	Reason
1. $\angle Y \cong \angle C$	1. Given
2. A is mdpt of $\overline{YC}$	2. Given
3. $\overline{YA} \cong \overline{CA}$	3. Defn. of midpt.
4. $\angle YAZ \cong \angle CAB$	4. Vertical $\angle$ s $\cong$
5. $\Delta YZA \cong \Delta CBA$	5. ASA $\cong$ Postulate.

19. Complete the following proof:



Statement	Reason
1. $\angle C \cong \angle B$	1. Given
2. $\overline{AC} \parallel \overline{BD}$	2. Given
3. $\angle CAD \cong \angle BDA$	3. Alt. Interior $\angle$ s $\cong$
4. $\overline{AD} \cong \overline{DA}$	4. Reflexive Property
5. $\Delta ACD \cong \Delta OBA$	5. AAS $\cong$ Postulate

**Unit 1 Review:**

Describe any rotations (of  $180^\circ$  or less) that will map each figure onto itself.

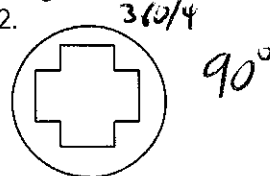
20.



21.

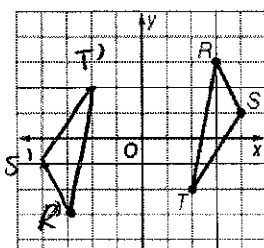


22.



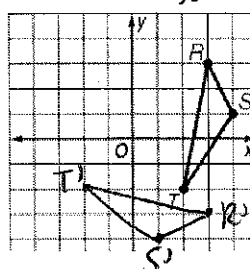
Draw the image of each figure, using the given transformation.

23. Rotation  $180^\circ$  about the origin  $(-x, -y)$



$(3,3) \rightarrow (-3,-3)$   
 $(4,1) \rightarrow (-4,-1)$   
 $(2,-2) \rightarrow (-2,2)$

24. Rotation  $90^\circ$  clockwise about the origin  $(y, -x)$



$(4,1) \rightarrow (1,-4)$   
 $(3,3) \rightarrow (3,-3)$   
 $(2,-2) \rightarrow (-2,-2)$