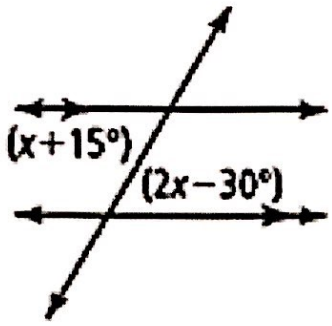
STATION #1:

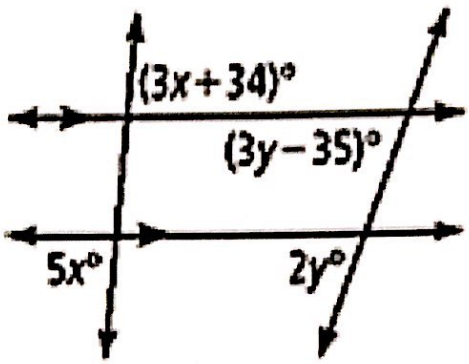
Geometric Properties

Directions: Find the value of each variable. Then find the measure of each labeled angle.

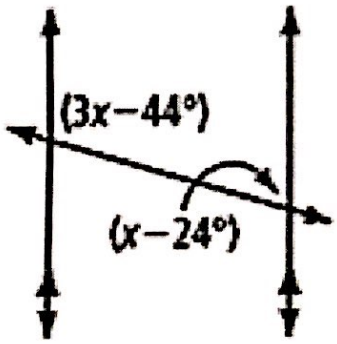
1.



2.



3.



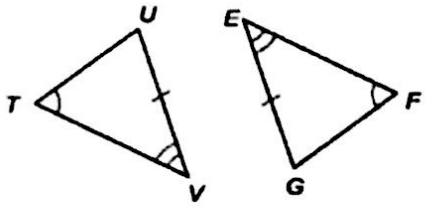
4. Draw and label a picture to represent the following:

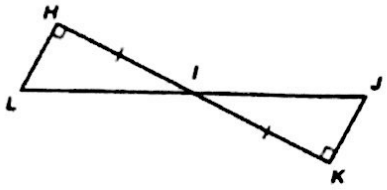
a) Angles WXA and BXY are obtuse vertical angles.
b) Angles AXY and YXC are complementary.
c) BXC is a right angle.

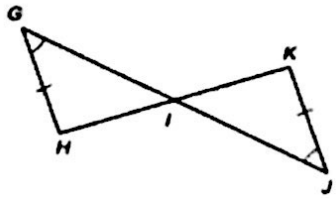
STATION #2:

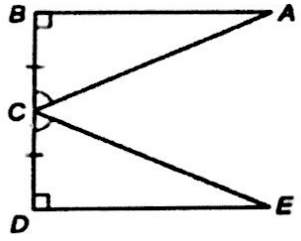
Triangle Congruence

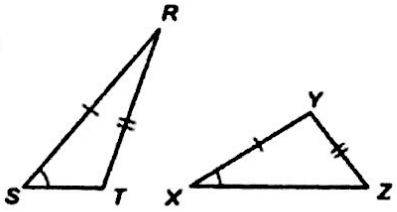
Determine whether each pair of triangles is congruent. If so, write a congruence statement and explain why the triangles are congruent. If it is not possible, write *not possible*.

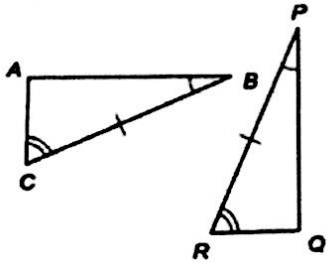
1. 

2. 

3. 

4. 

5. 

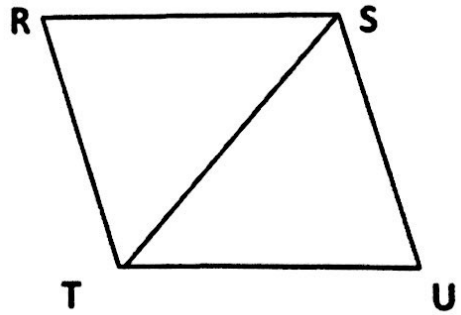
6. 

7. Write a Two Column Proof for the following:

Given: RS || TU , RS ≅ TU

Prove:

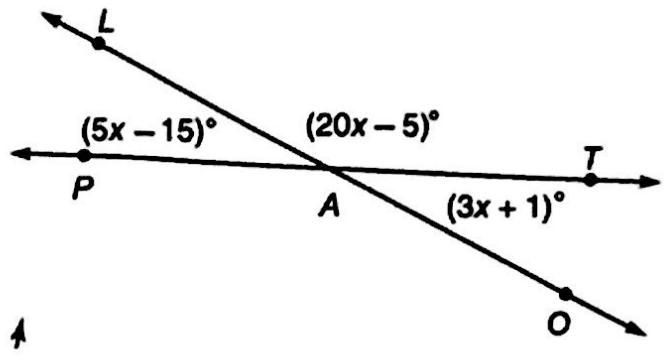
$\Delta RST \cong \Delta UTS$



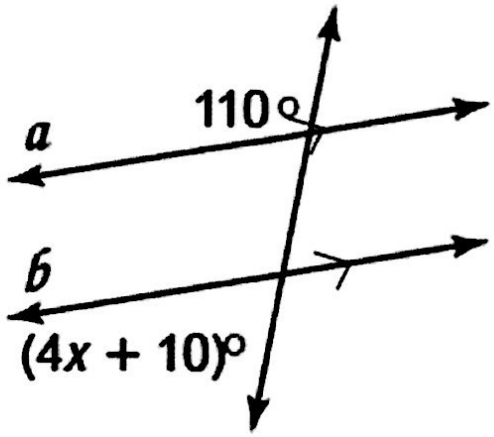
STATION #3:

Parallel Lines and Transversals

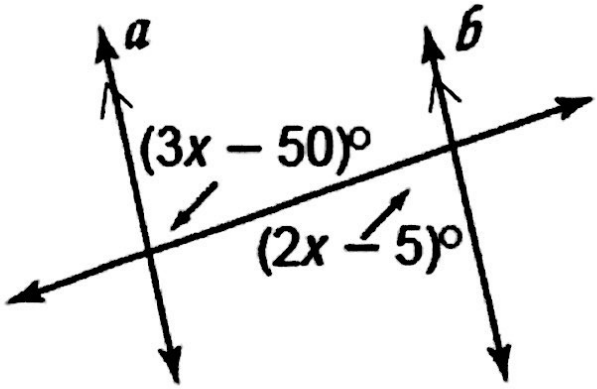
1. Use the figure to find:
   a. x =
   b. m∠LAT
   c. m∠TAO
   d. m∠*PAO*



2. Find x.



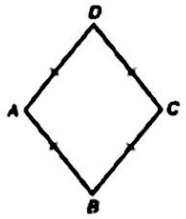
3. Find x.



Station #4
Quadrilateral Properties

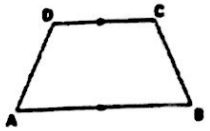
For #1-4 use the given, marked information to determine which type of quadrilateral you have. Be specific.

1.



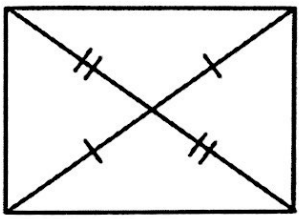
This is a _____.

2.



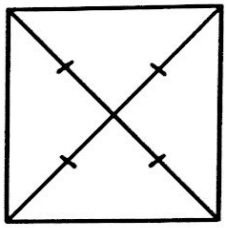
This is a _____.

3.



This is a _____.

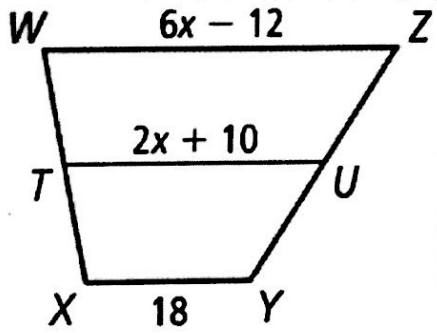
4.



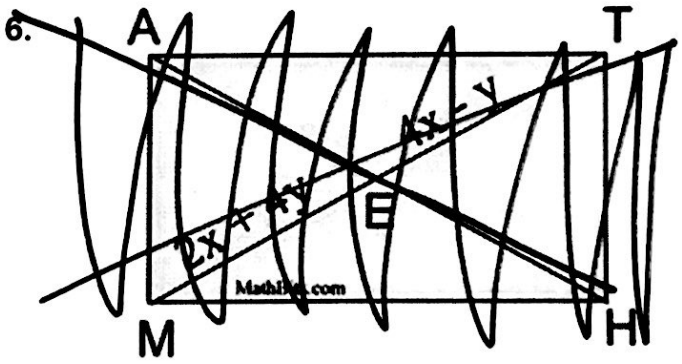
This is a _____.

Solve for x in #5-7

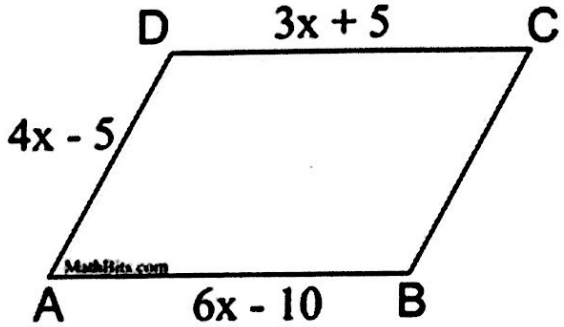
5.



6.



#6

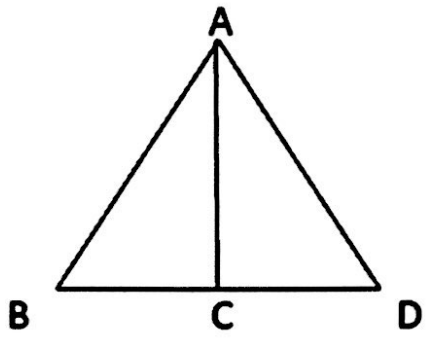


STATION #4

Proofs

1. Given: C is the midpoint of BD, AB ≅ AD

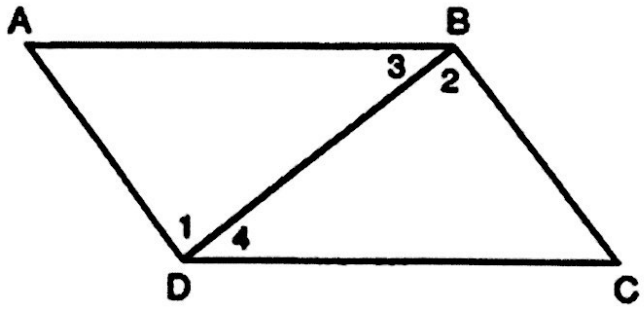
Prove:
$\Delta ABC \cong \Delta ADC$



2. Given: $\angle 1 \cong \angle 2$

$\angle 3 \cong \angle 4$

Prove: ▱ ABCD



STATION #5: