Name:

Date:

School:

Facilitator:

7.06 Trapezoids

Total Points: 28

1. Find the angle measures of the missing angles.

A Trapezoid
• The top side is marked parallel to the bottom side.
• The measure of the top left angle is 90 degrees.
• The measure of the bottom left angle is 90 degrees. 
• The measure of the top right angle is x.
• The measure of the bottom right angle is 60 degrees.



x =

1. SegmentT is the midsegment of the trapezoid. Find x.

A Trapezoid
• The top side is marked parallel to the bottom side.
• The left side has two segments with one congruence tick mark one each.
•                The right side has two segments with two congruence tick marks on each.
•                Point S is in the middle of the left side.
•                Point R is in the middle of the right side.
•                The length of segment ST is x.
•                The length of the top segment is 5.
•                The length of the bottom segment is 9.

S**R**

**T**

x =

1. Segment RT is the midsegment of the trapezoid. Find x.

A Trapezoid
• The top side is marked parallel to the bottom side.
• The left side has two segments with one congruence tick mark one each.
•                The right side has two segments with two congruence tick marks on each.
•                Point S is in the middle of the left side.
•                Point R is in the middle of the right side.
•                The length of segment RT is 10.5.
•               The top segment has a length of x.
•               The bottom segment has a length of 12.

**R**

**T**

x =

1. Find the midsegment of trapezoid ADCB given that A(1,1), D(5,1), C(4,8), and B(2,8).   
     
   a. State the coordinates of the endpoints of the midsegment. Show your work!

(      ,      ) and (      ,      )  
  
b. Verify that the midsegment is parallel to the bases of ADCB. Show your work!  
Slope of AD =

Slope of BC =        
Slope of midsegment =        
  
c. Verify that the length of the midsegment is half the sum of the lengths of the bases. Again, Show your work.

Length of AD =

Length of BC =        
Sum of length of bases:

Length of midsegment:

A Trapezoid in a Coordinate Plane
•               The coordinates of the vertices are B(2, 8), C(4, 8), D(5,1), and A(1, 1).
•            Point G is between points A and B with coordinates (1.5, 4.5).
Point H is between points C and D with coordinates (4.5, 4.5).
