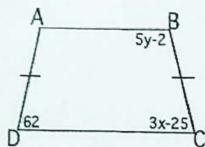
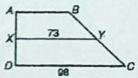
1. Find the values of x and y so that ABCD is an isosceles trapezoid with bases  $\overline{AB}$  and  $\overline{DC}$ . (Spoints)



2. Find the length of the midsegment  $\overline{KL}$  of trapezoid GHIJ. (3 points)



 $3.\overline{XY}$  is the midsegment of trapezoid ABCD. Find AB. (3 points)



AB =

4. Determine whether the following statements are sometimes, always or never true for quadrilaterals.

(1 point each)

a. A rhombus is a parallelogram.

- a. \_\_\_\_
- If the diagonals of a parallelogram are congruent then the figure is a rectangle.
- b. \_\_\_\_
- c. If both pairs of opposite angles are congruent, then the figure is a kite.
- C. \_\_\_\_

d. A trapezoid is a parallelogram.

d.

5. ABCD is a rectangle. 
$$AD = 15$$
,  $AC = 25$ , and  $DC = 20$ . Find BD. 3 points)



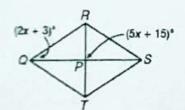
BD = \_\_\_\_

## $\triangle$ ABCD is a rectangle. BD = 12x - 6 and AX = 4x + 5. Find CX. (3 points)



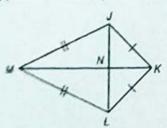
CX =

## 7. RSTQ is a rhombus. Find $m \angle QRP$ . (3 points)



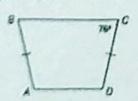
*m*∠*QRP* = \_\_\_\_\_

## ?. In kite JKLM, $m \angle NLK = 64^{\circ}$ . Find $m \angle JKL$ . (3 points)



*m*∠*JKL* = \_\_\_\_\_

## ¶ In trapezoid ABCD, find m∠A. (3 points)



m∠A = \_\_\_\_\_