

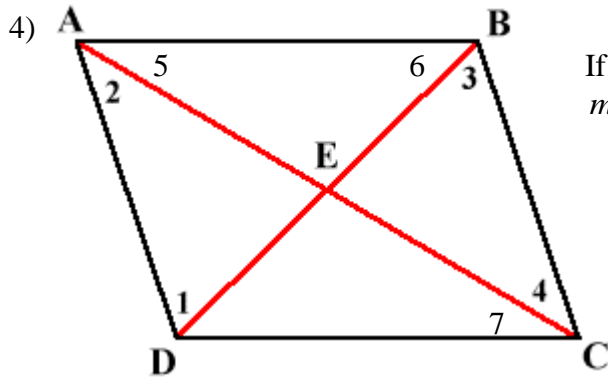
Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Class: \_\_\_\_\_

Geometry  
 Unit 6  
 HW 6-2

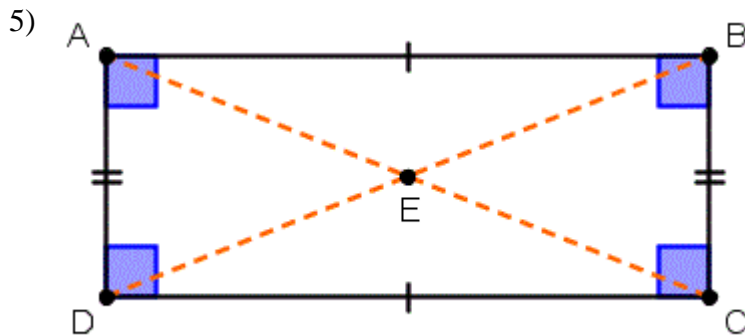
1) In  $\square PQRS$  the diagonals intersect at A. If  $PR = 5x + 1$  and  $PA = 3x - 3$ , find AR

2) In  $\square WXYZ$  if  $m\angle W = 10x - 50$  and  $m\angle X = 6x - 26$  find  $m\angle Y$

3) In rectangle ABCD,  $AC = 3x - 1$  and  $BD = 2x + 7$ . If the diagonals intersect at V find AV.

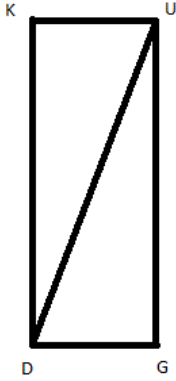


ABCD is a  $\square$  (not drawn to scale)  
 If  $m\angle 2 = 10x$ ,  $m\angle 5 = 6x + 4$ ,  
 $m\angle 4 = 8x + 12$ , Find  $m\angle 7$ .



If  $AB = x + 5$ ,  $BC = x - 2$ ,  
 and  $CD = 2x - 2$ , find the  
 perim and area of  $\triangle ADC$ .

6)



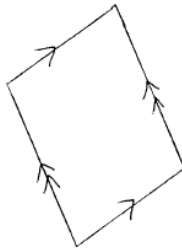
KUGD is a rectangle

$m\angle KUD = 10x - 8$ ,  $m\angle DUG = 5x - 7$ , and  $KU = 9$   
find the area of KUGD to the nearest tenth.

7) If a quadrilateral ABCD has the following angles which type of quadrilateral could it be:  $m\angle A = 12x - 10$ ,  $m\angle B = 7x - 19$ ,  $m\angle C = 10x + 12$ , and  $m\angle D = 7x + 3$ ?

8) If a quadrilateral has 4 sides and 4 right angles what type of quadrilateral could it be and how do you know?

9)



What type of quadrilateral is this and how do you know?

10) Two opposite sides of a rectangle are each 16 inches. The angle of elevation between the diagonal and one of the other sides of the rectangle is  $19^\circ$ . What is the perimeter of this rectangle?