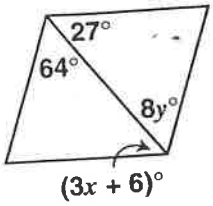
Name _____

Quadrilateral Quandary

Each quadrilateral below is a parallelogram. Find the values of x, y, and z.

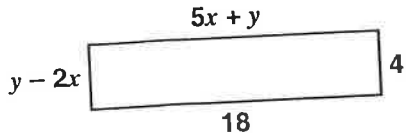
1.



$x =$ _____

$y =$ _____

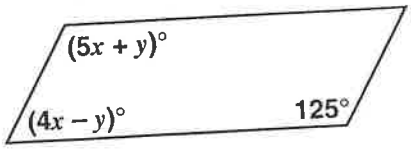
2.



$x =$ _____

$y =$ _____

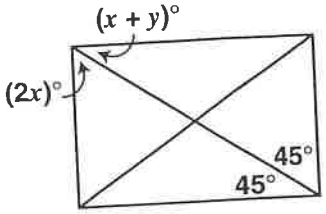
3.



$x =$ _____

$y =$ _____

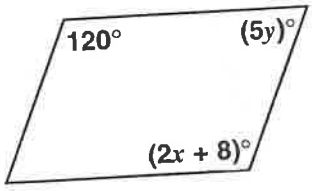
4.



$x =$ _____

$y =$ _____

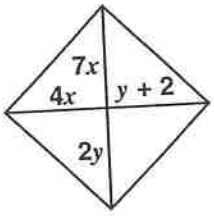
5.



$x =$ _____

$y =$ _____

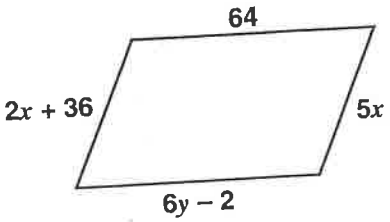
6.



$x =$ _____

$y =$ _____

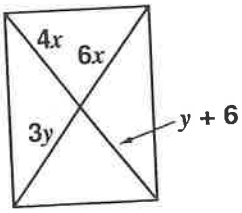
7.



$x =$ _____

$y =$ _____

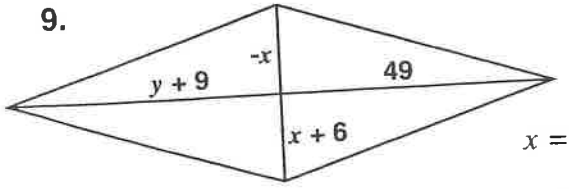
8.



$x =$ _____

$y =$ _____

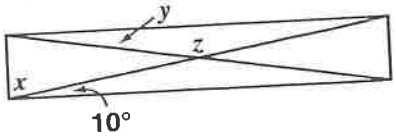
9.



$x =$ _____

$y =$ _____

10.



$x =$ _____

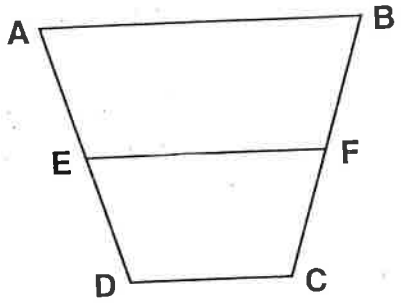
$y =$ _____

$z =$ _____

Name _____

Figure It Up

Refer to isosceles trapezoid ABCD and its median $\overline{EF}$ below to solve the problems.



1. If CD = 3 and AB = 7, find EF.
   EF = _____
2. If AB = 12 and EF = 10, find CD.
   CD = _____
3. If CD = 4 and AB = 8, find EF.
   EF = _____
4. If AB = $4x + 6$, CD = $8x + 2$, and EF = 10, find x.
   x = _____
5. Find EF if AB = 11 and CD = 3.
   EF = _____
6. Find m∠CFE if m∠BAE = 72°.
   m∠CFE = _____
7. If AB = 14 and EF = 10, find CD.
   CD = _____
8. If m∠FBA = $(15x + 5)°$ and m∠BAE = $(85 - 5x)°$, find x.
   x = _____
9. If EF = $10x + 3$, AB = 10, and CD = $8x + 20$, find x.
   x = _____
10. If AB = 22 and CD = 14, find EF.
    EF = _____
11. On another sheet of paper, draw a Venn diagram that shows how quadrilaterals are relate
    Include an explanation of your Venn diagram.