

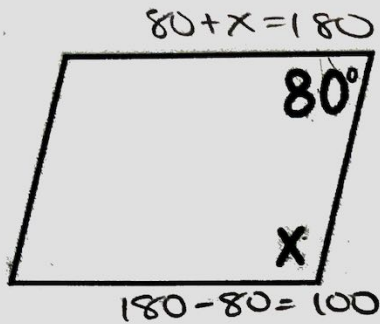
PARALLELOGRAM PROPERTIES

Name: _____

Date: _____ Period: _____

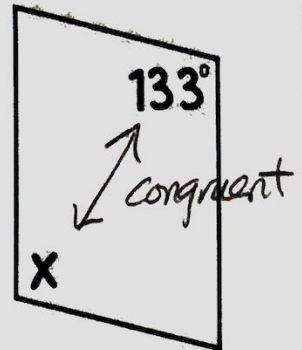
Assume sides that look parallel are parallel.

1.



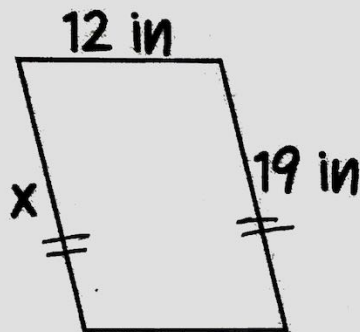
$x = 100^\circ$

2.



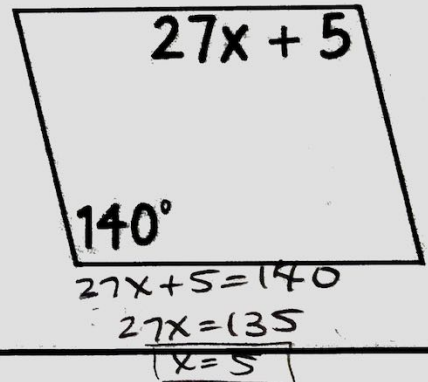
$x = 133^\circ$

3.



$x = 19 \text{ in.}$

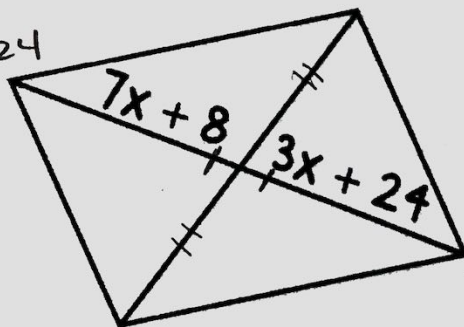
4.



$x = 5$

5.

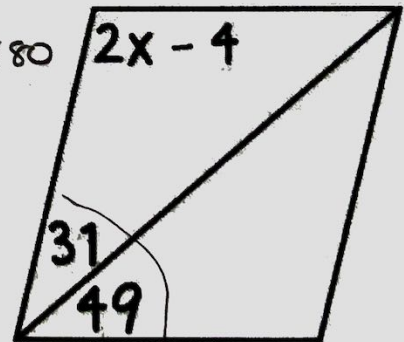
$7x+8=3x+24$
 $4x+8=24$
 $4x=16$
 $x=4$



$x = 4$

6.

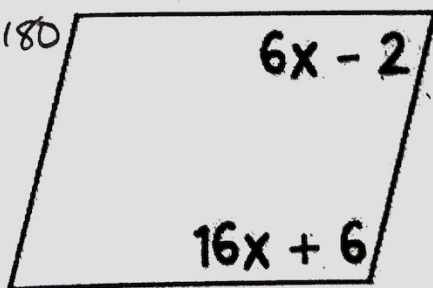
$2x-4+31+49=180$
 $2x+76=180$
 $2x=104$
 $x=52$



$x = 52$

7.

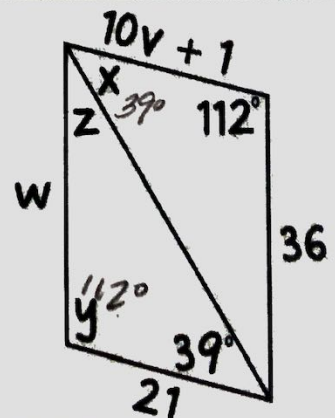
$6x-2+16x+6=180$
 $22x+4=180$
 $22x=176$
 $x=8$



$x = 8$

8.

$v = 2$
 $w = 36$
 $x = 39^\circ$
 $y = 112^\circ$
 $z = 29^\circ$



#8) $10v+1=21$
 $10v=20$
 $v=2$

$z+112+39=180$
 $z+151=180$

$z=29^\circ$

RECTANGLE PROPERTIES

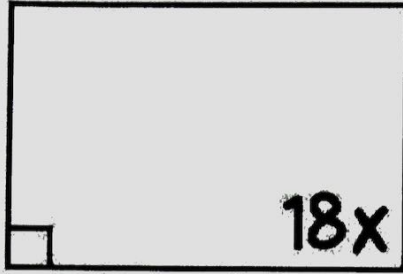
Assume all quadrilaterals are rectangles.

Name: _____
Date: _____ Period: _____

1.

$$18x = 90$$

$$x = 5$$



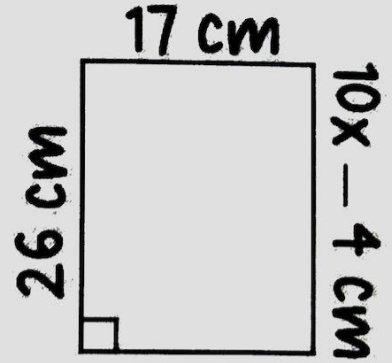
$$x = 5$$

2.

$$10x - 4 = 26$$

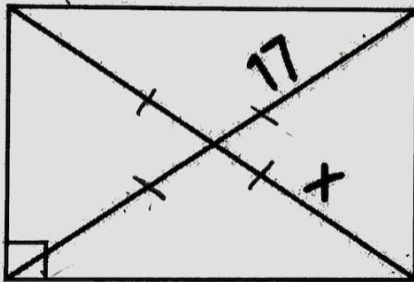
$$10x = 30$$

$$x = 3$$



$$x = 3$$

3.

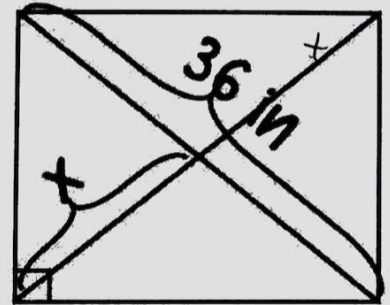


$$x = 17$$

4.

$$2x = 36$$

$$x = 18$$



$$x = 18$$

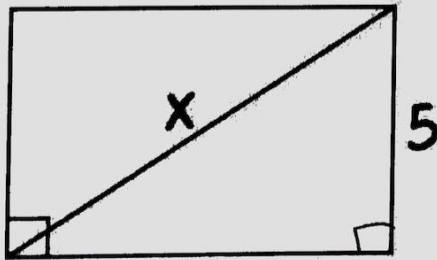
5. use Pythagorean theorem

$$12^2 + 5^2 = x^2$$

$$144 + 25 = x^2$$

$$169 = x^2$$

$$x = 13$$



$$x = 13$$

6.

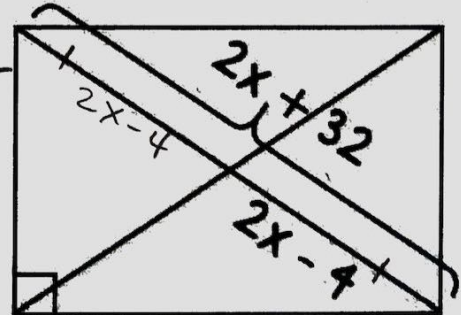
$$2(2x - 4) = 2x + 32$$

$$4x - 8 = 2x + 32$$

$$2x - 8 = 32$$

$$2x = 40$$

$$x = 20$$



$$x = 20$$

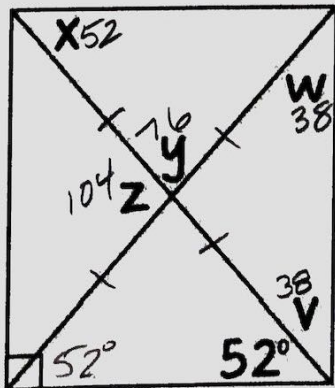
7. $v = 38$

$w = 38$

$x = 52$

$y = 76$

$z = 104$



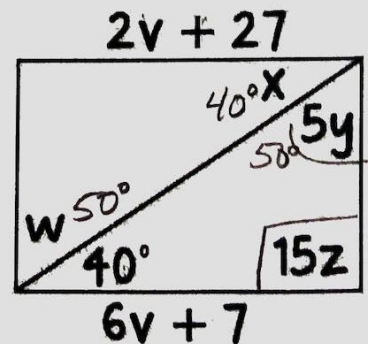
8. $v = 5$

$w = 50^\circ$

$x = 40^\circ$

$y = 10$

$z = 6$



#7 $90 - 52 = v$
 $38 = v$

$180 - 38 - 38 = 104$
 $180 - 104 = 76$

#8 $6v + 7 = 2v + 27$
 $4v + 7 = 27$
 $4v = 20$ $v = 5$