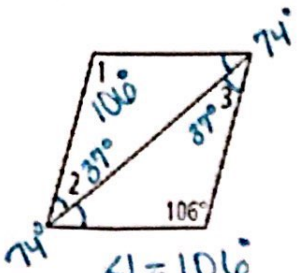


Day 3 – Properties of Rectangles, Rhombi, and Squares – Practice

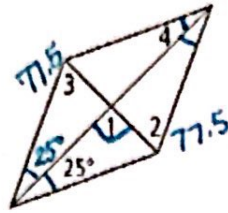
Practice: The following figures are rhombi. Find the measures of the missing angles.

1.



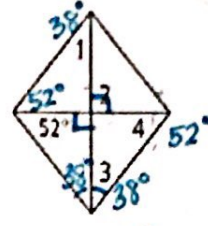
$\angle 1 = 106^\circ$
 $\angle 2 = 37^\circ$
 $\angle 3 = 37^\circ$

2.



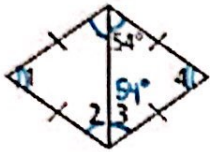
$\angle 1 = 90^\circ$
 $\angle 2 = 77.5^\circ$
 $\angle 3 = 77.5^\circ$
 $\angle 4 = 25^\circ$

3.



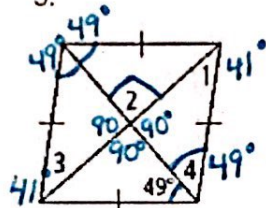
$\angle 1 = 38^\circ$
 $\angle 2 = 90^\circ$
 $\angle 3 = 38^\circ$
 $\angle 4 = 52^\circ$

4.



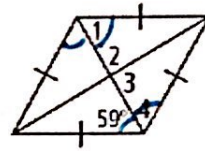
$\angle 1 = 72^\circ$
 $\angle 2 = 54^\circ$
 $\angle 3 = 54^\circ$
 $\angle 4 = 72^\circ$

5.



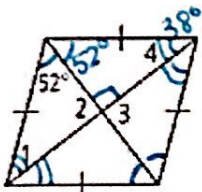
$\angle 1 = 41^\circ$
 $\angle 2 = 90^\circ$
 $\angle 3 = 41^\circ$
 $\angle 4 = 49^\circ$

6.



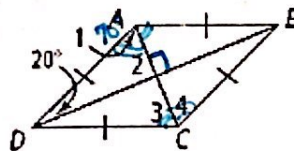
$\angle 1 = 59^\circ$
 $\angle 2 = 90^\circ$
 $\angle 3 = 90^\circ$
 $\angle 4 = 59^\circ$

7.



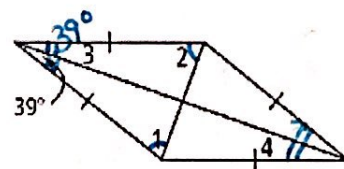
$\angle 1 = 38^\circ$
 $\angle 2 = 90^\circ$
 $\angle 3 = 90^\circ$
 $\angle 4 = 38^\circ$

8.



$\angle 1 = 70^\circ$
 $\angle 2 = 90^\circ$
 $\angle 3 = 70^\circ$
 $\angle 4 = 70^\circ$

9.

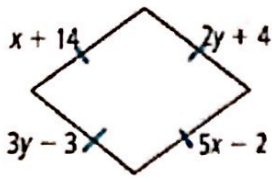


$180 - 39 - 39 = 102$
 $102 \div 2 = 51^\circ$

$\angle 1 = 51^\circ$
 $\angle 2 = 51^\circ$
 $\angle 3 = 39^\circ$
 $\angle 4 = 39^\circ$

Find the value of each variable for each diagram. The type of parallelogram is stated.

10. Rhombus



$$2y + 4 = 3y - 3$$

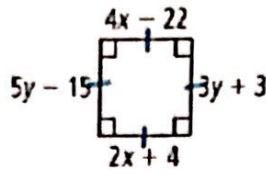
$$\boxed{7 = y}$$

$$x + 14 = 5x - 2$$

$$16 = 4x$$

$$\boxed{4 = x}$$

11. Square



$$2x + 4 = 4x - 22$$

$$26 = 2x$$

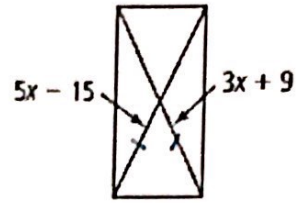
$$\boxed{13 = x}$$

$$5y - 15 = 3y + 3$$

$$2y = 18$$

$$\boxed{y = 9}$$

12. Rectangle

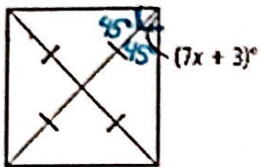


$$5x - 15 = 3x + 9$$

$$2x = 24$$

$$\boxed{x = 12}$$

13. Square

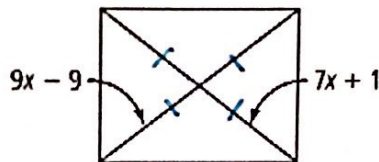


$$7x + 3 = 45$$

$$7x = 42$$

$$\boxed{x = 6}$$

14. Rectangle

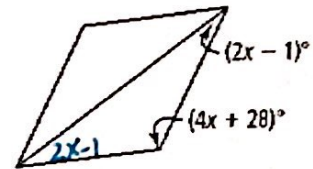


$$9x - 9 = 7x + 1$$

$$2x = 10$$

$$\boxed{x = 5}$$

15. Rhombus



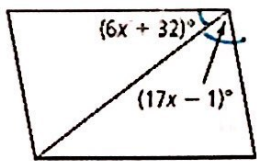
$$2x - 1 + 2x - 1 + 4x + 28 = 180$$

$$8x + 26 = 180$$

$$8x = 154$$

$$x = 19.25$$

16. Rhombus

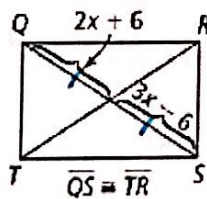


$$6x + 32 = 17x - 1$$

$$33 = 11x$$

$$\boxed{3 = x}$$

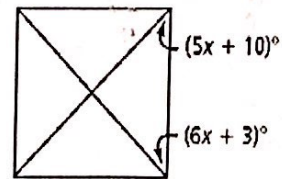
17. Rectangle



$$2x + 6 = 3x - 6$$

$$\boxed{12 = x}$$

18. ~~Rectangle~~ Square



$$5x + 10 = 45 \quad \text{OR} \quad 5x + 10 = 6x + 3$$

$$5x = 35$$

$$\boxed{x = 7}$$