

**Geometry**

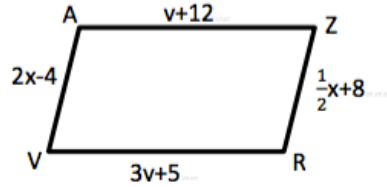
**Unit6 Test Review – Parallelogram**

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Period: \_\_\_\_\_

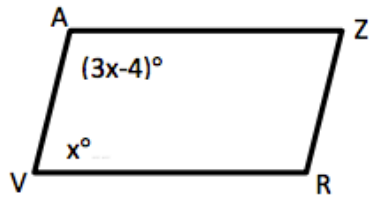
1. Given: VRZA is a parallelogram

Find the perimeter.



2. Given: VRZA is a parallelogram:

Find:  $m\angle A$  and  $m\angle Z$



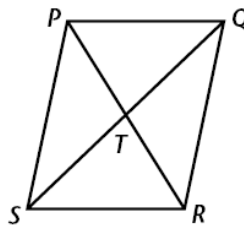
3. Given: Parallelogram ABCD. If  $m\angle A = 31$ ,  $m\angle C = 2x^2 - 1$ , find x.

4. Given: Parallelogram ABCD. If  $m\angle A = 4x + 11$ ,  $m\angle B = 6x - 1$ , find  $m\angle C$ .

5. PQRS is a rhombus. Solve for the variable requested.

Given:  $PQ=4y-7$ ,  $PS=y+8$

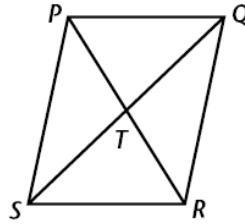
Find: The length of  $QR$ .



6. PQRS is a rectangle. Solve for the variable requested.

Given:  $PT=9x+20$ ,  $TS=10x+8$

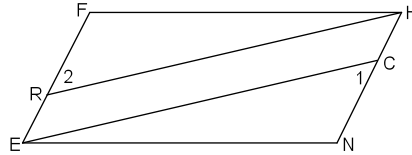
Find:  $PR$ .



7. Given: Parallelogram FHNE;

$\angle FHR \cong \angle NEC$

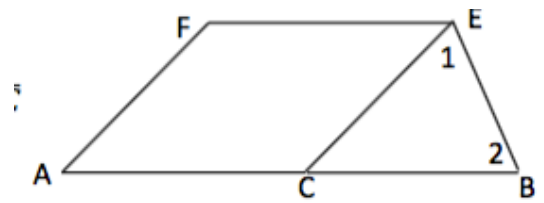
Prove:  $RH \cong EC$



Statements	Reasons

8. Given: ACEF is a rhombus;  $AC \cong BC$

Prove:  $\angle 1 \cong \angle 2$

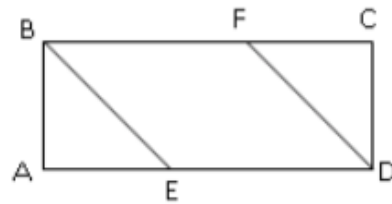


Statements	Reasons

9. Given: Parallelogram ABCD;

$$AE \cong CF, BF \cong DE$$

Prove: EBFD is a parallelogram



Statements	Reasons

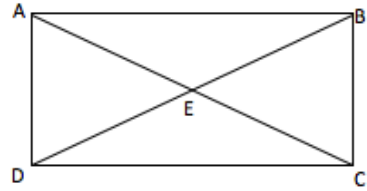
Mark the shapes that have each property.

	Parallelogram	Rhombus	Rectangle	Square
11. The diagonals are perpendicular				
12. The figure has four right angles.				
13. The opposite sides are congruent.				
14. The diagonals are congruent.				
15. The figure has four congruent sides.				
16. The diagonals bisect each other.				
17. The consecutive angles are supp.				
18. Each diagonal bisects opp angles.				

19. Think carefully about the properties of the polygon below. Answer the questions accordingly.

Rectangle ABCD

$DE = 10$ ,  $m\angle BCE = 62^\circ$



a.  $AC =$  \_\_\_\_\_

b.  $m\angle EDC =$  \_\_\_\_\_

c.  $m\angle AEB =$  \_\_\_\_\_

d.  $m\angle CBE =$  \_\_\_\_\_