

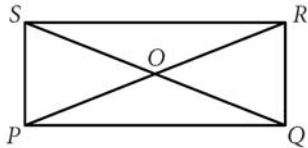
6.6 – Discovering Properties of Special Parallelograms

1) $PQRS$ is a rectangle and $OS = 16$.

$OQ = \underline{\hspace{2cm}}$

$m\angle QRS = \underline{\hspace{2cm}}$

$SQ = \underline{\hspace{2cm}}$

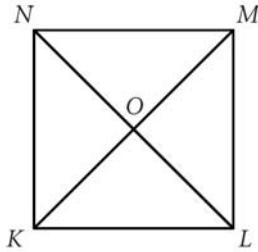


2) $KLMN$ is a square and $NM = 8$.

$m\angle OKL = \underline{\hspace{2cm}}$

$m\angle MOL = \underline{\hspace{2cm}}$

Perimeter $KLMN = \underline{\hspace{2cm}}$

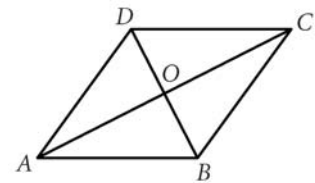


3) $ABCD$ is a rhombus, $AD = 11$, and $DO = 6$.

$OB = \underline{\hspace{2cm}}$

$BC = \underline{\hspace{2cm}}$

$m\angle AOD = \underline{\hspace{2cm}}$



In #4-12 match each description with all the terms that fit it.

a. Trapezoid

b. Isosceles triangle

c. Parallelogram

d. Rhombus

e. Kite

f. Rectangle

g. Square

h. All quadrilaterals

4) _____ Diagonals bisect each other.

5) _____ Diagonals are perpendicular.

6) _____ Diagonals are congruent.

7) _____ Measures of interior angles sum to 360° .

8) _____ Opposite sides are congruent.

9) _____ Opposite angles are congruent.

10) _____ Both diagonals bisect angles.

11) _____ Diagonals are perpendicular bisectors of each other.

12) _____ Has exactly one pair of congruent sides.

In #13-16, determine whether quadrilateral $ABCD$ with the given coordinates is a trapezoid, parallelogram, rectangle, or none of these.

13) $A(4, 0), B(12, 4), C(10, 8), D(2, 4)$

14) $A(5, 2), B(10, 3), C(6, 5), D(3, 2)$

Classify the quadrilateral $ABCD$. Explain your reasoning. Then find the values of x and y . Show all algebraic work.

