

Name: _____ Date: _____
 Geometry Worksheet After 5.4

Quadrilateral
 A. Parallelogram

C. Rectangle
 D. Rhombus

E. Square
 F. Kite

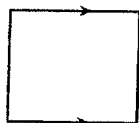
G. Trapezoid
 H. Isosceles Trapezoid

I. Write the letter of the figure from the list above that is best described by each definition given below.

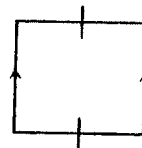
- _____ 1. A parallelogram with at least one right angle.
- _____ 2. A quadrilateral with exactly one pair of opposite sides parallel.
- _____ 3. A four-sided polygon.
- _____ 4. A quadrilateral in which two disjoint pairs of consecutive sides are congruent.
- _____ 5. A quadrilateral with both pairs of opposite sides parallel.
- _____ 6. A parallelogram with at least one pair of consecutive sides congruent.
- _____ 7. A trapezoid whose nonparallel sides are congruent.
- _____ 8. A parallelogram that is both a rectangle and rhombus.

II. Using the tick marks to assist you, select the letter of the figure from the list above that gives the most descriptive name.

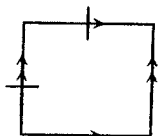
9. _____



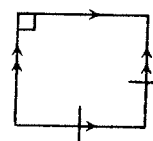
13. _____



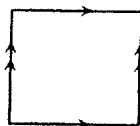
10. _____



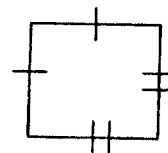
14. _____



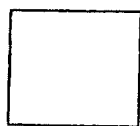
11. _____



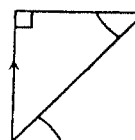
15. _____



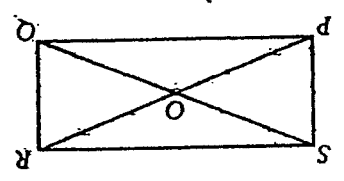
12. _____



16. _____

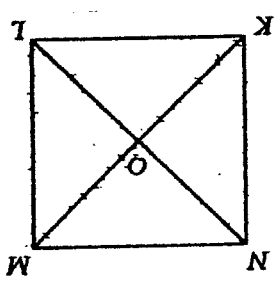


1) PQRS is a rectangle and OS = 16.



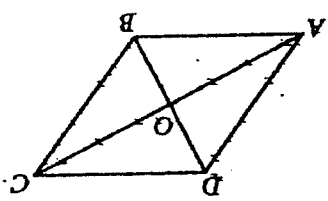
OQ = _____
 $m\angle QRS =$ _____
 SQ = _____

2) KLMN is a square and NM = 8.



$m\angle OKL =$ _____
 $m\angle MOL =$ _____
 Perimeter KLMN = _____

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

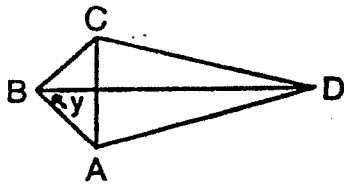


OB = _____
 BC = _____
 $m\angle AOD =$ _____

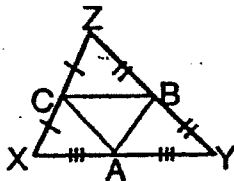
- | | | | | | | |
|-----------------------|------------------------|---------------------------------------|--|--|--|---|
| a. Trapezoid | e. Kite | 4. _____ Diagonals bisect each other. | 5. _____ Diagonals are congruent. | 6. _____ Opposite sides are congruent. | 7. _____ Both diagonals bisect angles. | 8. _____ Has exactly one pair of congruent sides. |
| b. Isosceles triangle | f. Rectangle | 9. _____ Diagonals are perpendicular. | 10. _____ Measures of interior angles sum to 360° . | 11. _____ Opposite angles are congruent. | 12. _____ Diagonals are perpendicular bisectors of each other. | |
| c. Parallelogram | g. Square | | | | | |
| d. Rhombus | h. All quadrilaterals. | | | | | |

Name: _____

1. Given: Kite ABCD; $m\angle BAC = 50$
Find y . _____

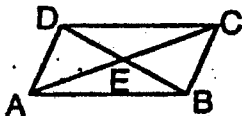


3. Given: $\triangle XYZ$ marked as shown
with $\overline{XY} = 12$, $\overline{YZ} = 16$, $\overline{XZ} = 14$
Find the perimeter of $\triangle ABC$. _____

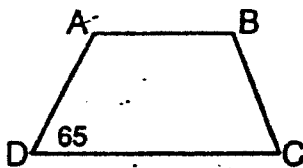


$P =$ _____

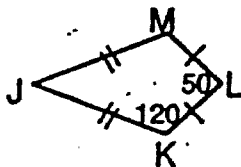
5. Given: Parallelogram ABCD
with $\overline{AB} = 20$, $\overline{BD} = 18$, $\overline{AC} = 24$
Find the perimeter of $\triangle DEC$. _____



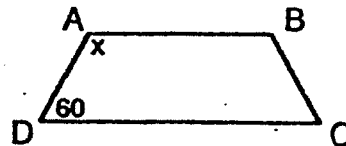
7. Given: Isosceles trapezoid ABCD
Find $m\angle B$. _____



9. Given: Kite JKLM
Find $m\angle J$. _____

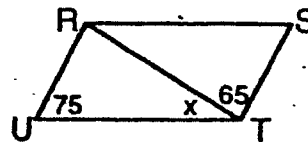


2. Given: Isosceles trapezoid ABCD
Find x . _____



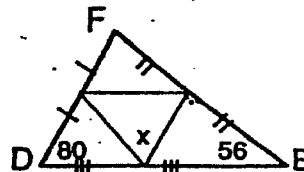
$x =$ _____

4. Given: Parallelogram RSTU
Find x . _____

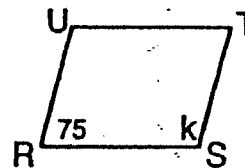


$x =$ _____

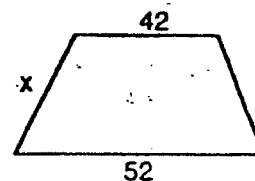
6. Given: $\triangle DEF$ marked as shown
Find x . _____



8. Given: Parallelogram RSTU
Find k . _____



10. Given: An isosceles trapezoid
with a perimeter of 120 cm.
Find x . _____

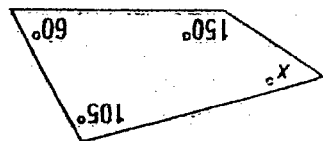


1. What type of polygon is shown below?



- (A) pentagon
(B) hexagon
(C) heptagon
(D) octagon

*Find the value of x .



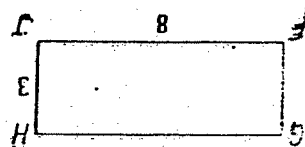
Sketch

- (F) 22
(G) 40
(H) 44
(J) 45

3. The diagonals of a parallelogram _____

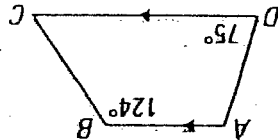
- (A) are congruent
(B) are perpendicular
(C) bisect each other
(D) are parallel

4. $FCHJ$ is a rectangle. What is FC ?



- (F) 3
(G) 5
(H) 8
(J) 11

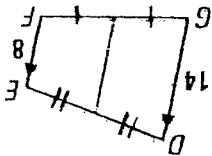
5. $ABCD$ is a trapezoid. Which of the following statements is true?



- (A) $m\angle C = 56^\circ$
(B) $m\angle A = 75^\circ$
(C) $\angle A$ and $\angle C$ are supplementary.
(D) $\angle C$ and $\angle D$ are supplementary.

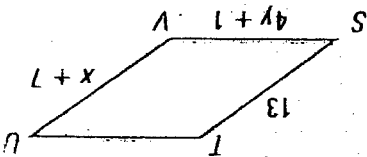
- (A) 8
(C) 10

- (B) 9
(D) 11



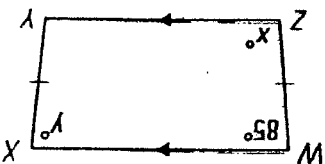
9. What is the length of the midsegment of trapezoid $DEFG$?

- (F) $x = 3, y = 3$
(G) $x = 3, y = 6$
(H) $x = 6, y = 3$
(J) $x = 6, y = 4$



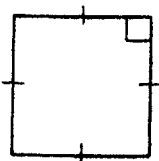
8. $STUV$ is a rhombus. What are the values of x and y ?

- (A) $x = 85, y = 95$
(B) $x = 100, y = 85$
(C) $x = 105, y = 85$
(D) $x = 95, y = 85$



7. $WXYZ$ is an isosceles trapezoid. What are values of x and y ?

- (F) parallelogram
(G) rhombus
(H) square
(J) trapezoid



6. Which of the following terms could *not* be used to describe the figure below?