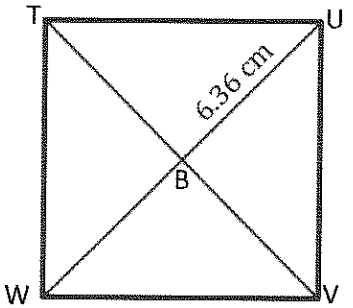
G5-M5-Lesson 20

1. Fill in the table below.

Shape	Defining Attributes
Trapezoid	• Quadrilateral • Has at least one pair of parallel sides
Parallelogram	• *A quadrilateral in which both pairs of opposite sides are parallel*
Rectangle	• A quadrilateral with 4 right angles
Rhombus	• A quadrilateral with all sides of equal length
Square	• A rhombus with four 90° angles • A rectangle with 4 equal sides
Kite	• *Quadrilateral with 2 consecutive sides of equal length* • *Has 2 remaining sides of equal length*

2. $TUVW$ is a square with an area of 81 cm^2, and $UB = 6.36$ cm. Find the measurements using what you know about the properties of squares.



a. $UW =$ 12.72 cm

Diagonals of a square bisect each other, so $\overline{UB}$ and $\overline{BW}$ are equal in length. $6.36 + 6.36 = 12.72$

b. $TV = UW = 12.72$ cm

I know that in a square the diagonals are equal in length.

c. Perimeter = 36 cm

I know that in a square every side length is equal, so I need to think about what times itself is equal to 81. I know that 9×9 is 81, so each side is 9 cm. Since there are 4 equal sides, I can multiply 9×4 to get the perimeter.

d. $m\angle TUV =$ 90 °

I know every angle in a square must be 90° because it is a defining attribute of a square.