

7.4 Quadrilaterals

EQ: How can you classify quadrilaterals?

Quadrilateral
four sides

Flow Chart → see foldable

Sum of the angle measures of a quadrilateral

Formula: $w + x + y + z = 360^\circ$

* all angles add up to 360°



Example 1: Classify the quadrilateral

①



Kite

2 pairs of congruent, adjacent sides, opposite sides are not congruent

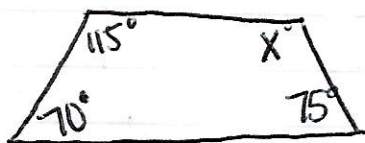
②



Rhombus

• a parallelogram with 4 congruent sides.

Example 2: Find the value of x



$$115 + 70 + 75 + x = 360$$

$$260 + x = 360$$

$$\begin{array}{r} -260 \\ -260 \end{array}$$

x = 100°

Quadrilateral

Parallelogram

Trapezoid

Rectangle

Kite

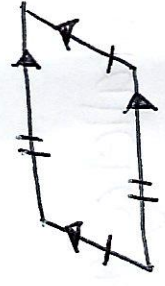
Rhombus

Flow
chart

Square



• A 4 sided figure



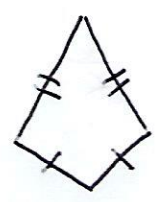
• A quadrilateral with opposite sides that are parallel and congruent.



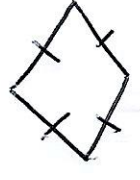
A quadrilateral with exactly one pair of parallel sides



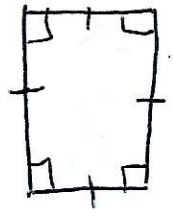
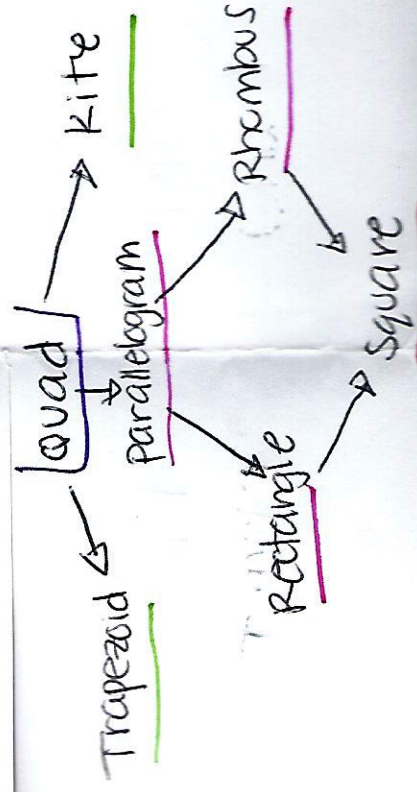
• A parallelogram with 4 right angles



• A quadrilateral with two pairs of congruent, adjacent sides and opposite sides that are not congruent



• a parallelogram with four congruent sides



• A parallelogram with four congruent sides and four right angles