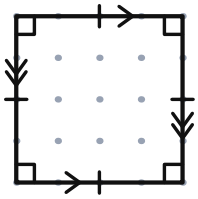
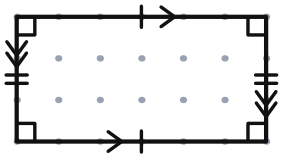
Quadrilaterals Chart: The Quadrilateral Family

Each type is named by what it must have. The marks show it.



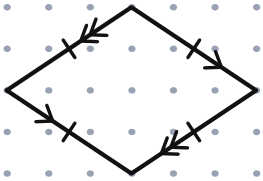
square

4 equal sides and 4 square corners



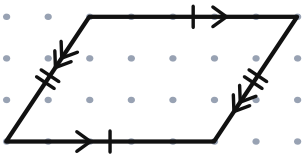
rectangle

4 square corners



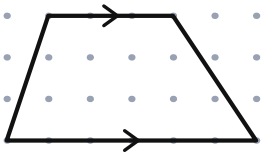
rhombus

4 equal sides



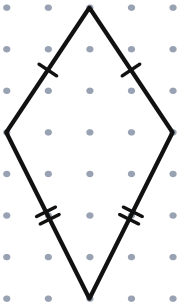
parallelogram

2 pairs of parallel sides



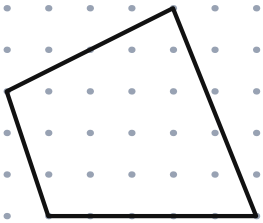
trapezoid

a pair of parallel sides: at least one pair, or exactly one pair, depending on the book



kite

2 pairs of equal sides, each pair side by side



other quadrilaterals

4 straight sides, nothing more

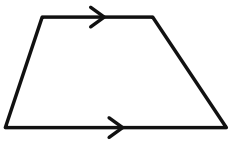
The marks

- same marks: sides the same length
- small square: a square corner
- arrows: parallel sides

Quadrilaterals Chart: How They Fit Together

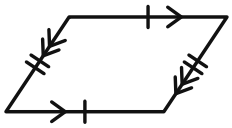
A shape can have more than one name. Follow the lines up.

quadrilateral
4 straight sides



trapezoid
a pair of parallel sides

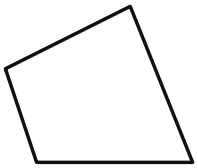
only in the 'at least one pair' definition



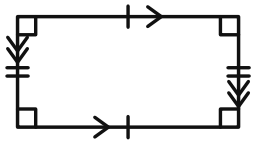
parallelogram
2 pairs of parallel sides



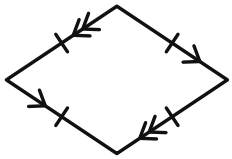
kite
2 pairs of equal sides, side by side



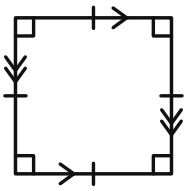
other
nothing more



rectangle
4 square corners



rhombus
4 equal sides



square
both

The four questions

1. Does it have 4 straight sides, closed?
2. How many pairs of parallel sides?
3. Are the corners square?
4. Are all the sides equal?

For Grown-Ups: How to Use These Charts

A chart for the fridge or beside homework. For second and third grade.

Why use it

One shape can have several names: a square is also a rectangle and a rhombus. Common Core asks third graders to see that shapes sharing attributes make a larger group, such as quadrilaterals (3.G.A.1), and Texas names rhombuses, parallelograms, trapezoids, rectangles, and squares as quadrilaterals (TEKS 3.6(B)). Third grade takes two levels of the family; the whole tree comes in fifth.

What it is good for

- The six types of quadrilateral and what each must have.
- Reading the marks: equal sides, square corners, parallel sides.
- Seeing how the types fit together, the square under both the rectangle and the rhombus.

How to use it

1. Point to a type and read what it must have.
2. Find its marks on the drawing: the ticks, the small squares, the arrows.
3. Ask the four questions in order about a shape you find at home.
4. Cut out the shapes and play Mystery Quadrilateral: one of you picks a shape, the other asks yes-or-no questions until they can name it.

> **Try saying:** “Four square corners, so it is a rectangle. Are all its sides equal too?”

Tip: Books define a trapezoid two ways: at least one pair of parallel sides, or exactly one pair. Every trapezoid here has exactly one pair, so it is right either way. Use the definition your child's class uses.