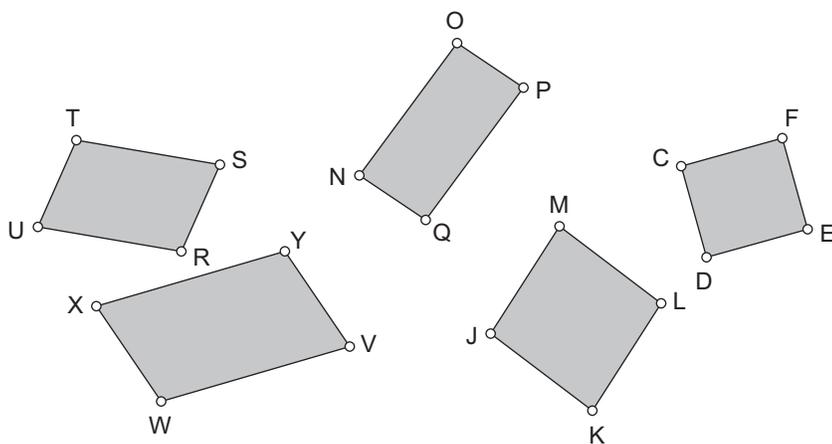


If you see a shape that looks like a square, how do you know whether it's really a square? In Sketchpad, you can use the drag test. This test will show you those shapes that really are what they appear to be, and those that are only pretending.

EXPLORE



1. Open **Quadrilateral Pretenders.gsp**. Go to page "Parallelogram Pretenders." Of the five shapes that look like parallelograms, only two are constructed to always have opposite sides parallel. Drag the vertices to find them and match each shape to its most specific name.



- | | |
|-------------|---------------|
| <i>JKLM</i> | parallelogram |
| <i>NOPQ</i> | trapezoid |
| <i>CDEF</i> | kite |
| <i>RSTU</i> | rectangle |
| <i>VWXY</i> | quadrilateral |

Which two quadrilaterals are parallelograms?

What shape is a type of parallelogram but also has a more specific definition?

2. Go to page "Rhombus Pretenders." Of the five shapes that look like rhombuses, only one is constructed to always have four congruent sides. Find it, and identify each shape with its most specific name.

- | | |
|-------------------|-------------------|
| <i>ABCD</i> _____ | <i>RUST</i> _____ |
| <i>EFGH</i> _____ | <i>VWXY</i> _____ |
| <i>NOPQ</i> _____ | |

Quadrilateral Pretenders



continued

3. Go to page "Trapezoid Pretenders." Of the four shapes that look like isosceles trapezoids, only one is constructed to always be an isosceles trapezoid. Find it, and identify each shape with its most specific name.

ABCD _____

JKLM _____

NOPQ _____

EFGH _____

4. Go to page "Square Pretenders." Of the six shapes that look like squares, only one is constructed to always be a square. Match each shape to its most specific name.

ABCD

rhombus

WXYZ

kite

KLMN

quadrilateral

STUV

rectangle

CRAB

parallelogram

FISH

square

5. Go to page "Rectangles." Drag shapes that are always rectangles to the top of the page. Drag shapes that can pretend to be rectangles to the bottom of the page and make them look like rectangles.
6. Go to page "Parallelograms." Drag shapes that are always parallelograms to the top of the page. Drag shapes that can pretend to be parallelograms to the bottom of the page and make them look like parallelograms.
7. Go to page "Trapezoids." Drag shapes that are always trapezoids to the top of the page. Drag shapes that can pretend to be trapezoids to the bottom of the page and make them look like trapezoids.

EXPLORE MORE

8. Go to page "Make Your Own." Pick a type of quadrilateral and construct it. Then make a pretender of that shape. For example, you might make a square and a rhombus, or you might make a rectangle and a parallelogram.

Shape _____

Pretender's shape _____