## Quadrilateral Properties

Quadrilaterals.gsp

From the menu page, choose "Parallelogram", and complete the chart.
$\begin{array}{|c|c|c|}\hline \text { Click on the highlight bar called: } & \begin{array}{c}\text { DRAG point A } \\ \text { to see what happens. }\end{array} & \text { Your Answer: } \\ \hline \text { <Show Side Measures> } & \begin{array}{c}\text { Are the opposite sides always } \\ \text { congruent? }\end{array} & \\ \hline \text { <Hide Side Measures> } & \text { Are the opposite angles always } \\ \text { congruent? }\end{array} \quad \begin{array}{c}\text { <Show Angle Measures> } \\$\cline { 2 - 3 } <br> \hline <Hide Side Measures> <br> $\left.\begin{array}{c}\text { Are the consecutive angles always } \\ \text { supplementary? }\end{array} \\ \hline \text { <Show Angles formed by Diagonals> }\end{array} \begin{array}{c}\text { Are the diagonals always perpendicular } \\ \text { to each other? }\end{array}\right]$


Transfer your parallelogram answers to the chart below, and fill in the other members of the quadrilateral family in the same investigative style.

## Properties of the Quadrilateral Family

| Properties | Parallelogram | Rectangle | Rhombus | Square | Isosceles <br> Trapezoid |
| :---: | :--- | :--- | :--- | :--- | :--- |
| Opposite Sides <br> Always Congruent? |  |  |  |  |  |
| Opposite Angles <br> Always Congruent? |  |  |  |  |  |
| Consecutive Angles <br> Always <br> Supplementary? |  |  |  |  |  |
| Diagonals Always <br> Perpendicular? |  |  |  |  |  |
| Diagonals Always <br> Congruent? |  |  |  |  |  |
| Diagonals Always <br> Bisect Each Other? |  |  |  |  |  |

