

**TI-Nspire Activity:** *Pick's Theorem*

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**Activity Overview**

Students will place polygons on a grid and measure the area. Students will count border points and interior points and discover Pick's Theorem.

**Concepts**

Students will translate data given in a table to an equation.

**Teacher Preparation**

Students should have already studied area for an irregular shape.

**The Classroom.**

Students will need to do this activity in small groups.

-Students will need the TI-Nspire document *pick's theorem.tns*. This document uses a Notes page and a Graphs and Geometry page.

**The Document**

Students will count the border points and interior points of an irregular polygon and measure its area.

To measure the area, the measurement tool will be used.

 :Measurement :Area

Students will change the polygon, keeping the vertices on grid points. Stress the importance of this to the students.

Students will enter this data in a chart on the student worksheet. Use the table developed, students will discover the equation that is Pick's Theorem.