

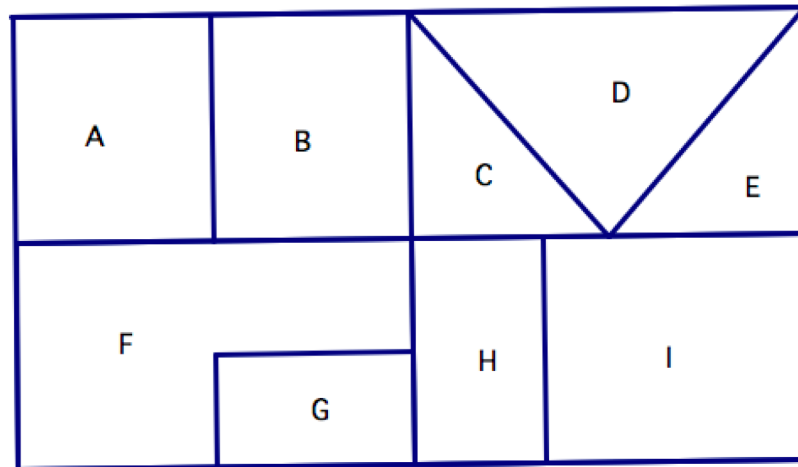
ENGAGING STUDENTS WITH FRACTION TASKS AND MODELS

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FRACTION AREA

Find the fractional area for each portion of land (with regards to the whole rectangle).

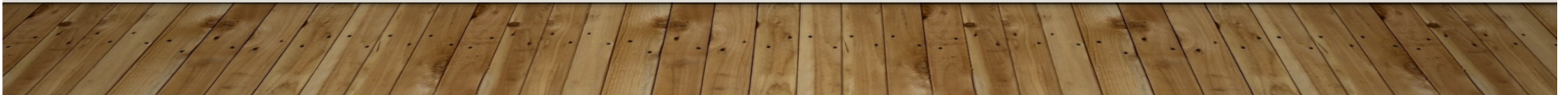


TUPELO TOWNSHIP TASK

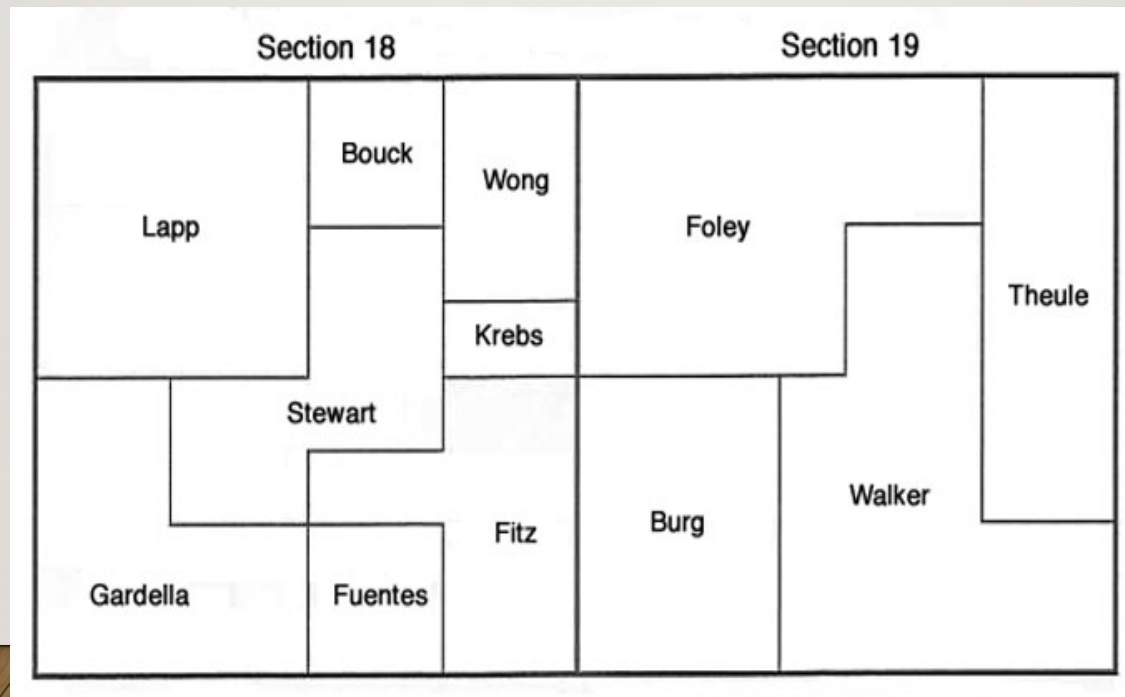
When Tupelo Township was founded, the land was divided into sections. Each section is 1 square mile. There are 640 acres of land in a 1-square-mile section. The diagram below shows two adjacent or side-by-side sections of land. Each section is divided among several owners.

Connected Mathematics: Bits & Pieces II (Lappan et. al, 2009)

Determine what fraction of a section each person owns.



TWO SECTIONS OF TUPELO TOWNSHIP



THEATER PROBLEM

One sixth of the theater's seats are in the balcony. Last night four fifths of the main floor seats were filled. Three fourths of the balcony seats were filled. There were 27 people in the balcony.

Tell everything you can about the theater last night. Make 2 columns. The first column should tell what you know. In the second column show how you know that.

This is what I know.	This is how I know it.

KEN'S GRAVEL

Ken got $\frac{2}{3}$ of a ton of gravel even though he ordered $\frac{3}{4}$ of a ton of gravel. What fraction of his order did Ken get?

- Draw pictures to help you solve this problem. Explain why your answer is correct.
- In solving this problem, how do $\frac{2}{3}$ and $\frac{3}{4}$ appear in different forms?
- What are the different wholes associated with the fractions in this problem? In other words, for each fraction in this problem, and its solution, what is the fraction *of*?

SMITH, HENLEY, & HANK

Mr. Smith owns $\frac{3}{4}$ of a rectangular plot of land that had belonged to Mr. Henley. One of Mr. Henley's heirs, Hank, is to get $\frac{1}{4}$ of Mr. Henley's land. Hank will receive this land from Mr. Smith. What fraction of Mr. Smith's land should Hank get?

- Draw a picture to help you solve this problem. Explain your answer clearly.
- For each fraction in this problem, and in your solution, describe the *whole* that each fraction is associate with.

QUESTIONS

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