

Connected Mathematics Project
Bit and Pieces II
Investigation 4
Problem 4.2

Some of the owners of landing Sections 18 and 19 sold their land to other people who already owned land in these sections.

The clues below describe the results of several transactions.

Clue 1 When all the sales are completed, four people – Theule, Fuentes, Wong, and Gardella – own all the land in the two sections.

Clue 2 Theule bought from one person and now owns land equivalent to $\frac{1}{2}$ of one section.

Clue 3 Fuentes bought from three people and now owns the equivalent of $\frac{13}{32}$ of one section.

Clue 4 Gardella now owns the equivalent of $\frac{1}{2}$ of a section.

Clue 5 Wong now owns all the rest of the land in the two sections.

Clue 6 Each of the four owners can walk around all their land without having to cross onto another person's land.

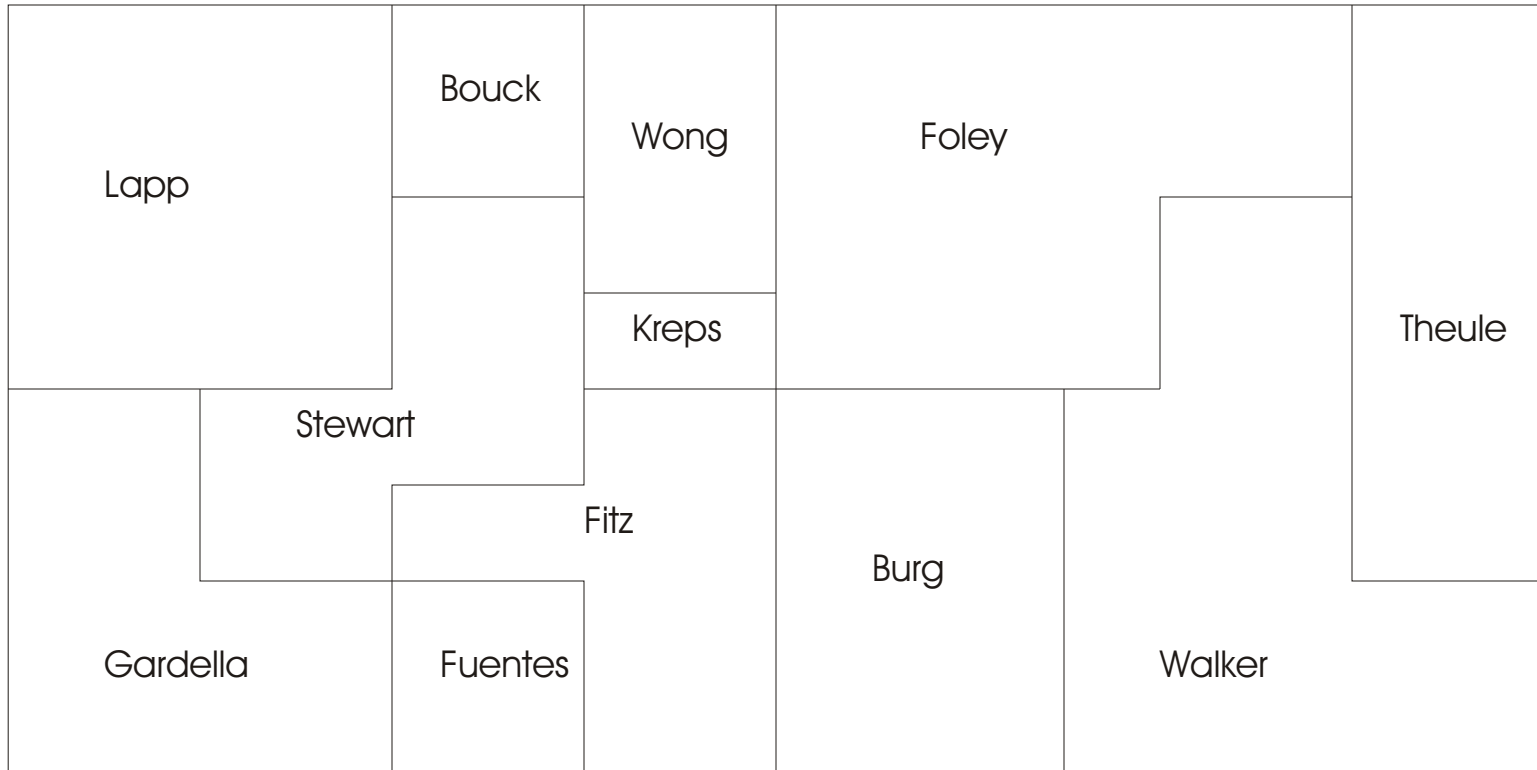
A. Use the clues to determine what transactions took place. Determine exactly which pieces of land Theule, Fuentes, Wong, and Gardella bought, and explain how you know you are correct.

B. Draw a new map of the two sections, outlining the land belonging to each of the four owners. Tell how many acres each person now owns.

Note: a section is one square mile or 640 acres.

Section 18

Section 19



Section 18

Section 19

