Families used to arrive in the Westport area (near present-day Kansas City, Missouri) during the winter. Around April, the muddy trails would begin to dry, and the settlers would start their westward journey. But rainy weather could still make roads muddy and slow a wagon train’s progress.

The three main trails to the eastern slope of the Rocky Mountains were

- the Smoky Hill Trail, which followed the Smoky Hill River to Denver, Colorado
- the Santa Fe Trail, which followed the Arkansas River to southern Colorado
- the Oregon Trail, which followed the North Platte River to Laramie, Wyoming

Note: These descriptions use the names given by settlers to places and geographical features.

Your Task

Over the years, the owner of the Westport Trading Post has heard from various friends concerning the weather they found on their routes.

The owner has compiled a table, showing the number of rainy days each friend encountered. Different entries for a given trail represent different years on that trail.
A big argument occurs one evening. It seems that family members looking at the same data cannot agree on which trail would be the driest. Of course, the dryness of a trail was not the only factor in choosing the route.

1. If you were on the Overland Trail, which trail would you choose? Why?

2. Addison Pengra says he would choose the trail that had the fewest rainy days on average.
   a. Which trail would Addison choose? Explain your thinking.
   b. What are some advantages and disadvantages of Addison’s method?

3. Lydia Pengra says she would make her choice this way: She’d look at the numbers for each trail, put them in order, and then find the number in the middle of the list. Then she’d choose the trail that had the smallest middle number.
   a. Which trail do you think Lydia would choose, based on her method? Explain your thinking.
   b. What are some advantages and disadvantages of Lydia’s method?