

Skills:

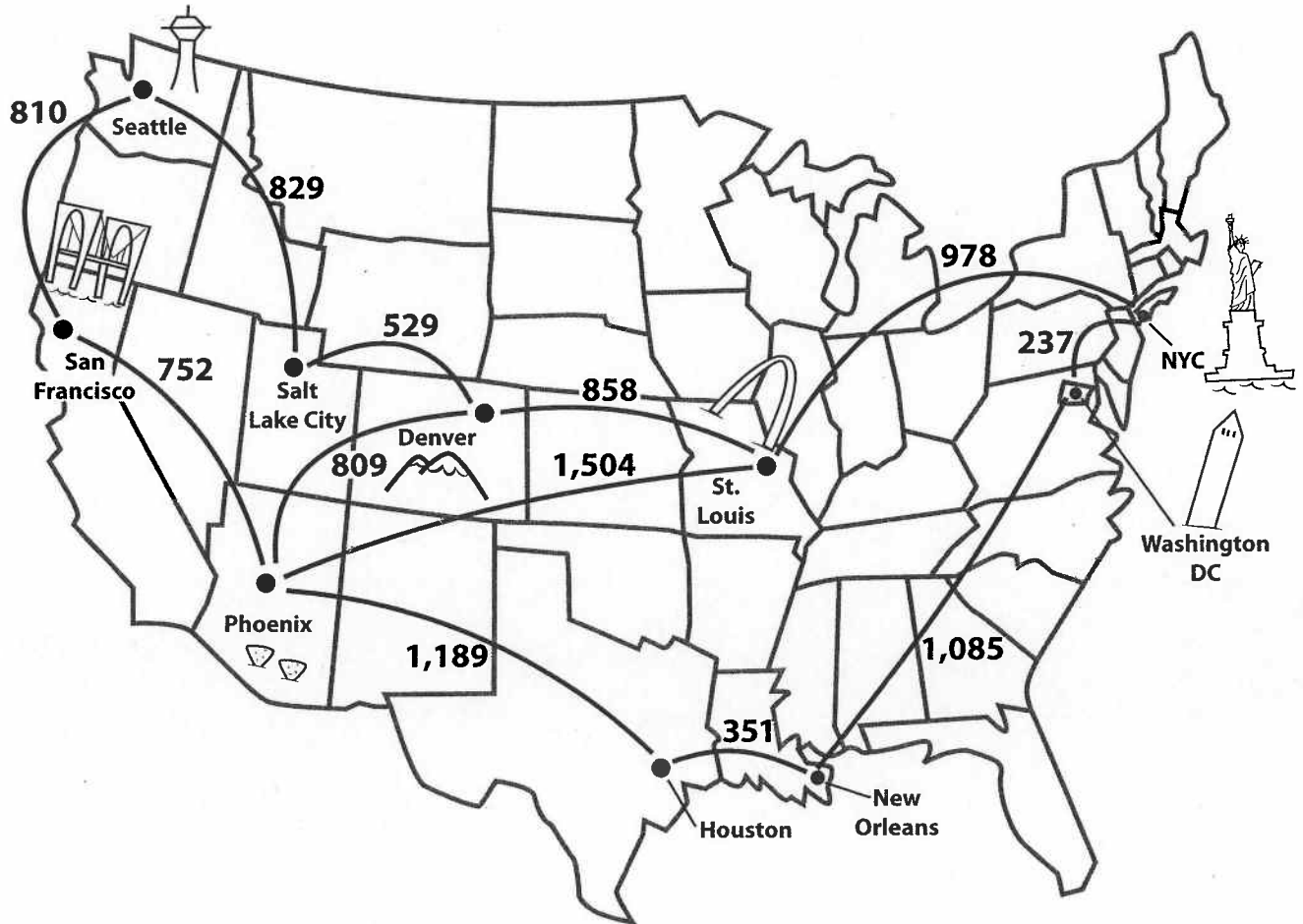
Solving problems based on mileage data in a map

On the Road: Data Sheet

Our vast country offers travelers so much to see! Kim's family is going to see a lot of it this summer on a cross-country car trip. Her family will start from their home in San Francisco, California. They plan to visit many great cities in the United States.

The map below shows driving distances between some cities.

Road Mileage Between U.S. Cities



On the Road: Activity Sheet

Use the Data Use the map and any new data provided below to solve each problem.

1. Of all the possible routes from San Francisco to St. Louis, which is the shortest?

2. Use the mileages and lengths of line segments on the map as guides. About how far would you estimate it is to drive from Houston directly to St. Louis? _____
3. What if Kim's family drives from Seattle to Salt Lake City at an average speed that is 10% below the speed limit? If the speed limit were 60 miles per hour, how long would the drive take? Round to the nearest hour. _____
4. What if the family drives from Salt Lake City to Denver and back, at a speed of 65 miles per hour each way? If they stop for 2.5 hours on each trip, how long will it take to go and return? Round to the nearest hour. _____
5. What if gasoline costs \$2.50 a gallon? If Kim's car holds 14 gallons and gets 25 miles to the gallon, about how much would Kim pay for gas to drive from Houston to San Francisco? Round to the nearest dollar. _____

Write About It

Use the map on the Data Sheet. Make up your own "What if?" question for classmates to solve. Write the answers on *another sheet of paper.*

6. What if _____

Make an Itinerary

Using a U.S. road atlas, pick any two cities that are at least 1,500 miles apart. Plan any route you like between them. On separate paper, write an itinerary. Include:

- ⊙ distances and estimated driving speeds
- ⊙ daily start and end times
- ⊙ approximate number of miles driven and stops made per day
- ⊙ estimated costs of gas, food, and lodging

Display your itinerary. Compare and contrast yours with friends' itineraries.

DAY 1

Distance we'll travel: _____

Driving speed: _____

Total drive time: _____

Number of stops (where and how long?):

- _____
- _____
- _____

Total stop time: _____

Start time: _____

End time: _____

Food cost:

Breakfast _____

Lunch _____

Dinner _____

Gas cost: _____

Hotel/lodging cost: _____

Total costs: _____