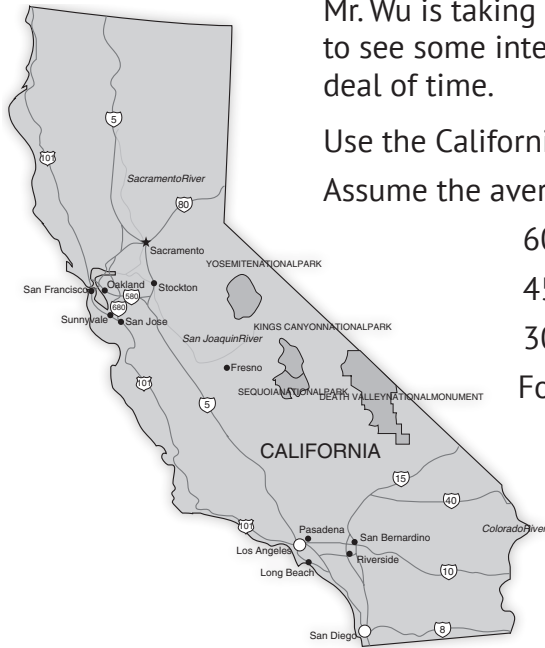# The Road Trip

A Mathematical Modeling Task

Mr. Wu is taking a trip from Los Angeles to San Francisco. He wishes to see some interesting sights in California, but does not have a great deal of time.

Use the California map to plot 2 different routes for Mr. Wu.

Assume the average rate on the various roads is as follows:

> 60 miles per hour on Interstate Highways

> 45 miles per hour on U.S. Federal Highways

> 30 miles per hour on State Roads

For each route, determine the number of miles Mr. Wu will travel and the time it will take him. Show your calculations and explain your thinking.

Then, write a letter to Mr. Wu explaining why one of your chosen routes is the best for him. Include information about the miles he will travel, the estimated time the trip will take, and the sights he can see along the way.

EXTENSION

Determine the cost of Mr. Wu's trip, including gas charges (at the current price of gas), price of entrance to any attractions or sights along the route, and lodging if required.