

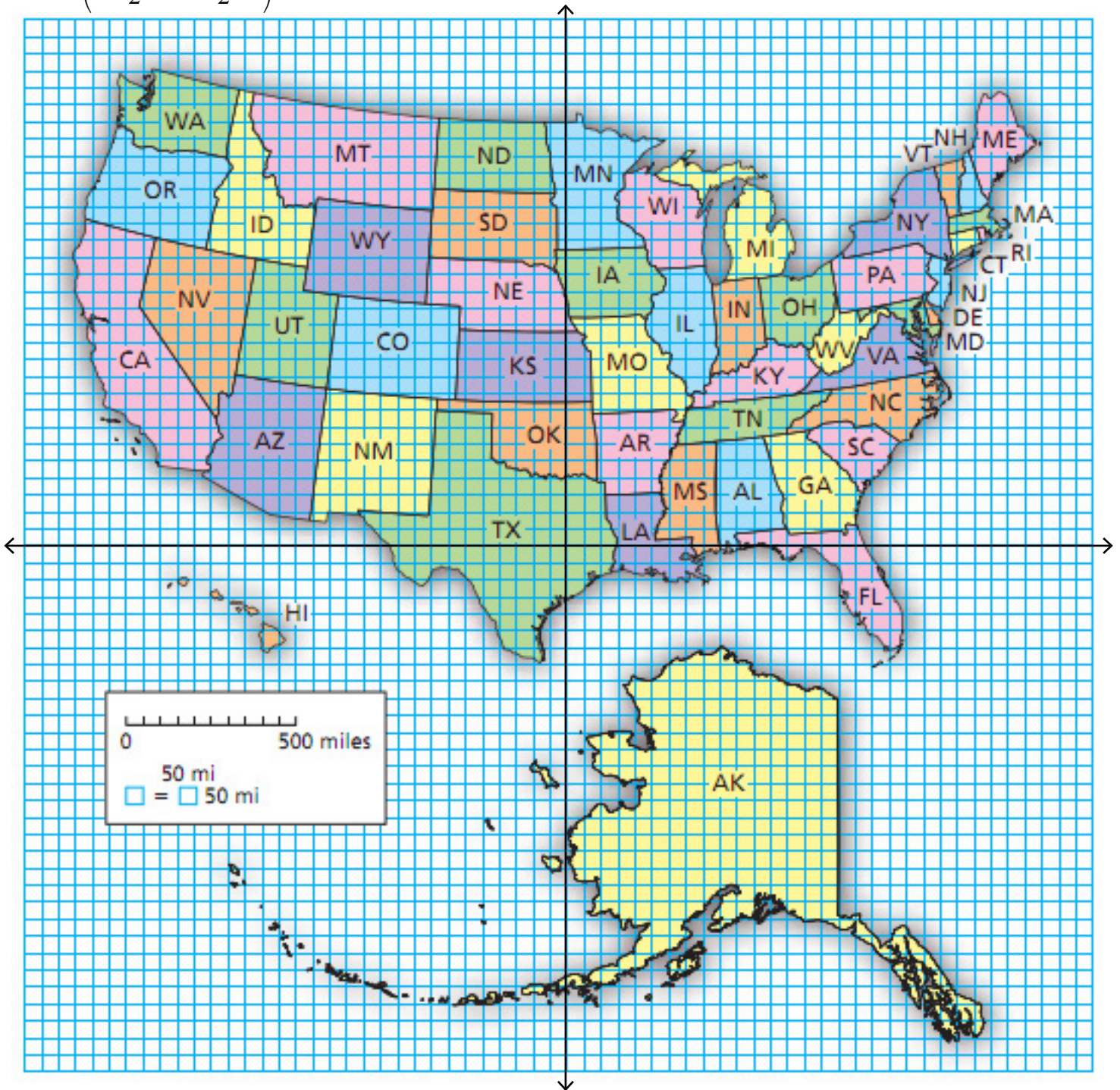
# Distance and Midpoint

Midpoint Formula:

$$\left( \frac{x_2 + x_1}{2}, \frac{y_2 + y_1}{2} \right)$$

Distance Formula:

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$



You are planning a trip across the US, you have to travel through at least 10 states.

1. Find the total distance between the Start and Finish that you will travel.
2. Split your trip up into 5 days, find the distance you will travel each day (try to pick locations you would want to visit).
3. You **MUST** make a pit stop every day for gas and food, you have to stop exactly half-way every day, find your stopping states (aka your midpoint)!