

Name _____

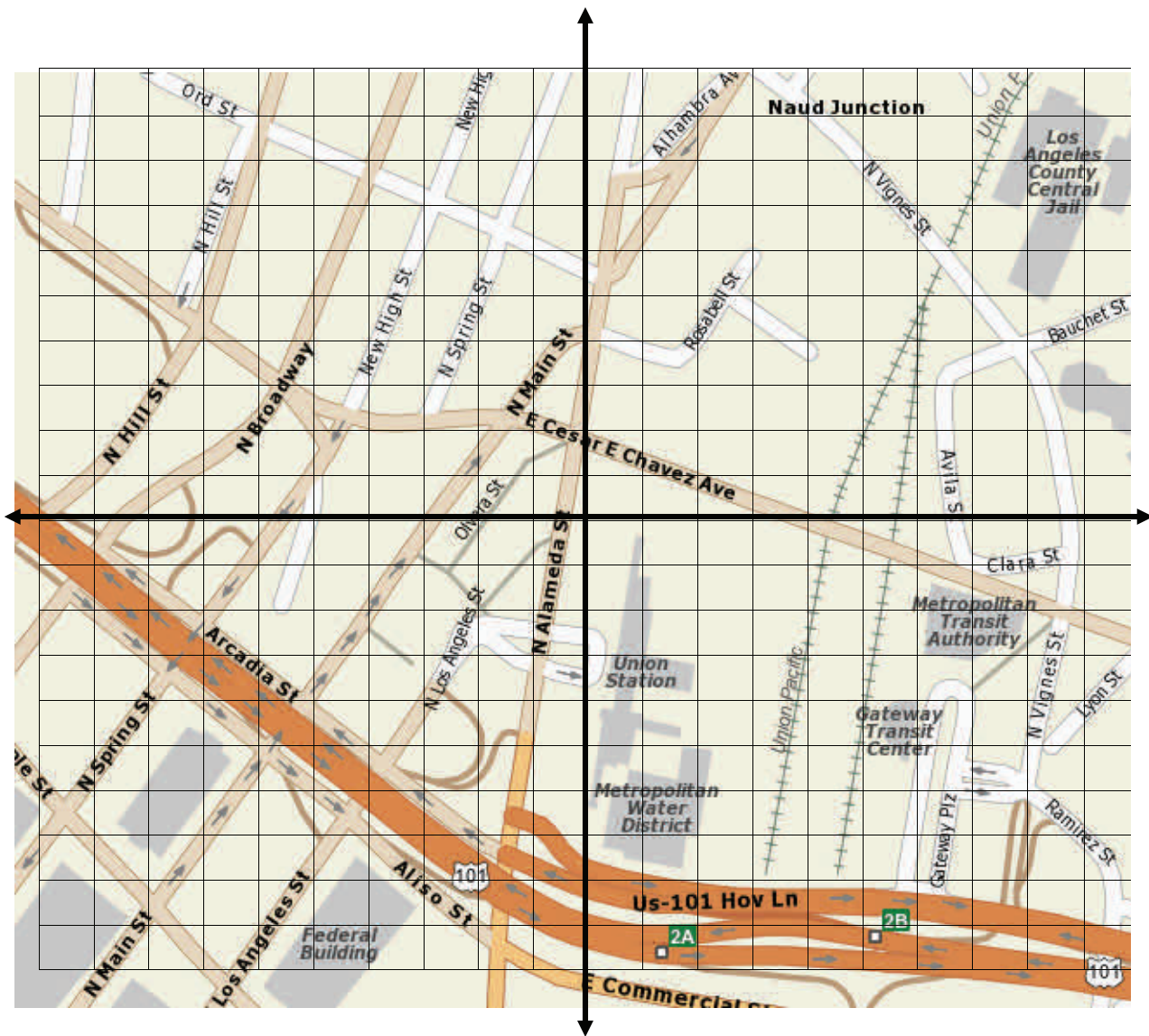
Date _____

NUMB3RS ACTIVITY: What area is the criminal targeting?

In the episode “Blackout,” there is a series of attacks on the substations that provide electricity to the city of Los Angeles. The team is investigating the sabotage at the power stations. The FBI has intercepted the codes for the next attack. Graph the two equations that model each of the next two attacks to determine what area the criminal is targeting. Mark the solution set with an S.

Blackout Attack 1: $2y \leq -14 + 4x$

Blackout Attack 2: $y \geq 2 + \frac{1}{3}x$



1. According to your graph, what is the criminal targeting? _____

2. Why do you think they are targeting this area? (be creative) _____

3. Don needs to know how many FBI agents he can send to the targeted area. To figure this out, he needs to solve the following equation based on the availability of his agents (Let a = agents):

$$4(a - 18) = a - 15$$

How many agents can he afford to send to the scene? _____

4. The city is monitoring the amount of daily electricity available for certain areas of LA. The highest electricity use was 50,000 megawatts and the lowest use was 40,000 megawatts.

a) Write a compound inequality to describe this situation.

b) Graph the solution of this inequality on the number line below.

