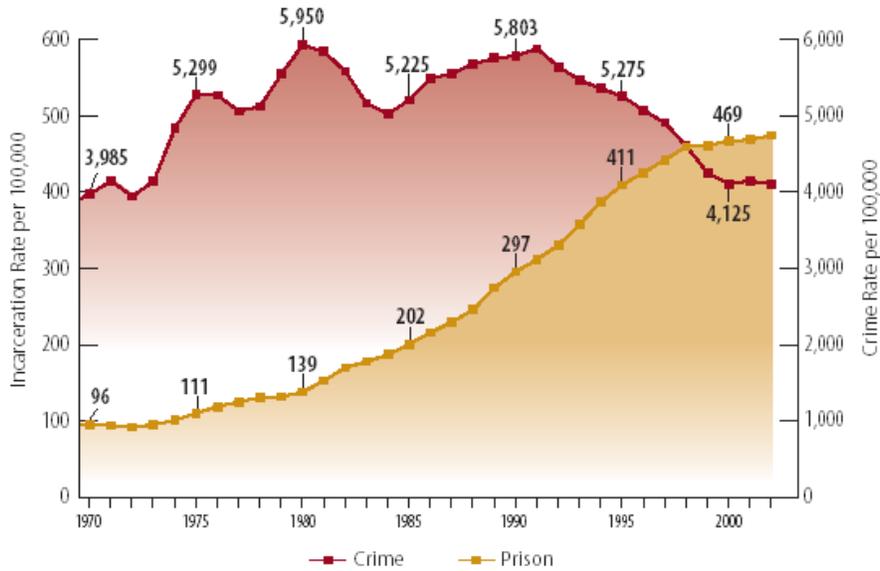


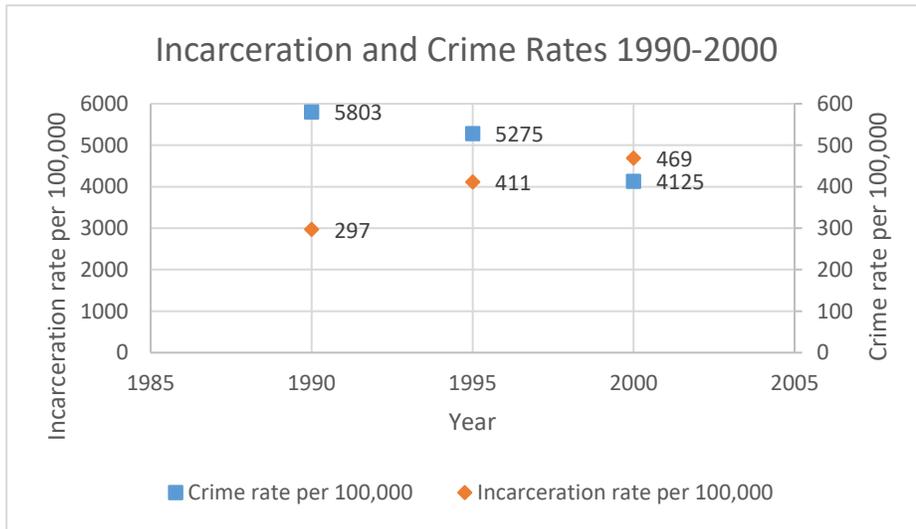
**Incarceration and Crime Rates**

Examine this data on incarceration and crime rates in the US from 1970-2003. What does it mean that both are “per 100,000” people?



Sentencing Project

Here is a summary of the data from 1990-2000, taking the numbers from 1990, 1995, and 2000.



Sentencing Project

From this smaller graph, take a ruler and draw an extended line through two of the three data points for each line.

Rewrite each data point as an ordered pair, using the year 1990 as the x-coordinate 0, 1995 as the x-coordinate 1, and 2000 as the x-coordinate 2.

Crime Rate

( \_\_\_\_\_, \_\_\_\_\_ )

( \_\_\_\_\_, \_\_\_\_\_ )

Incarceration Rate

( \_\_\_\_\_, \_\_\_\_\_ )

( \_\_\_\_\_, \_\_\_\_\_ )

Then, using the two given data points which you drew your line through, calculate the slope of each line.

What does the slope represent? What does this say about incarceration and crime?

Using one of the ordered pairs that you used to find the slope, find the y-intercept of each line, and write the linear equation for each line. What does the y-intercept represent for the data?

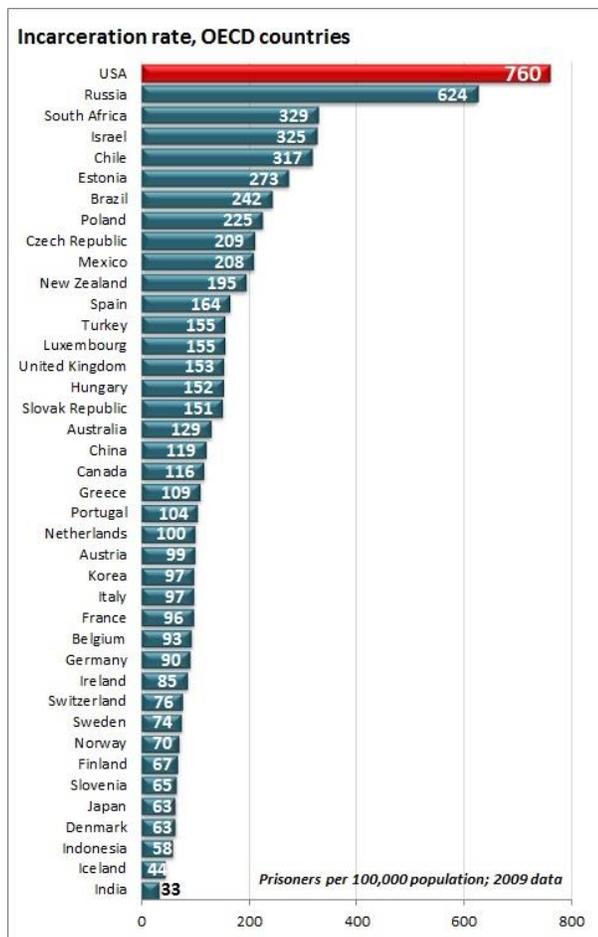
Using the equation that you found, and one of the ordered pairs you used to calculate the slope, find the x-intercept of each line. What does this x-intercept represent?

Now, using the equations you found, predict the crime rate and incarceration rate for the years 2005, 2010, and 2030 assuming the change through time is linear.

Look back at the original graph from the Sentencing Project. Do your predictions for crime and incarceration rates make sense? Why or why not? Is it useful to put these types of data into linear equations?

What do all these numbers add up to?

“In 1992, there were 1.3 million inmates in America's prisons and jails; by two decades later, a million more had been added. The majority of those—around 60 percent—are in state prisons, where most people who commit crimes end up. Only around 10 percent are in federal prisons, despite the attention those prisons receive; the rest are held in local jails. And that doesn't include the millions more on probation and parole. At the end of 2011, there were 2.2 million Americans incarcerated, 854,000 on parole, and almost 4 million on probation, meaning just under 7 million Americans—or one out of every 34 adults—were being supervised by the criminal-justice system.” —Paul Waldman, *Six Charts that Explain Why Our Prison System Is So Insane*



How does this compare to other countries?

“[The United States imprisons]” more of our citizens than any other country in the world [...]. As a proportion of our population we imprison 17 times as many people as Iceland, 12 times as many as Japan, and 10 times as many as Switzerland. The only country that even gets into the same neighborhood as us is Russia. We don't just beat out developed countries, we're also ahead of less-developed countries—all of them. Despite a slight drop in 2011, our rate remains over 700 prisoners for every 100,000 residents. Rwanda has Africa's highest incarceration rate at 595 prisoners per 100,000 population (many of whom participated in the country's genocide in 1994). The highest in Central America, Belize, has 439 prisoners per 100,000 population, while South America's highest is Chile at 305. The highest in Asia is Kazakhstan at 351. None even approach America's rate. —Paul Waldman, *Six Charts That Explain Why Our Prison System Is So Insane*

<https://prospect.org/article/six-charts-explain-why-our-prison-system-so-insane>