## This is the best explanation of gerrymandering you will ever see

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By Christopher Ingraham
Gerrymandering -- drawing political boundaries to give your party a numeric advantage over an opposing party -- is a difficult process to explain. If you find the notion confusing, check out the chart above -- adapted from one posted to Reddit this weekend -- and wonder no more.

Suppose we have a very tiny state of fifty people. Thirty of them belong to the Blue Party, and 20 belong to the Red Party. And just our luck, they all live in a nice even grid with the Blues on one side of the state and the Reds on the other.

Now, let's say we need to divide this state into five districts. Each district will send one representative to the House to represent the people. Ideally, we want the representation to be proportional: if 60 percent of our residents are Blue and 40 percent are Red, those five seats should be divvied up the same way.

Fortunately, because our citizens live in a neatly ordered grid, it's easy to draw five lengthy districts -- two for the Reds, and three for the Blues. Voila! Perfectly proportional representation, just as the Founders intended. That's grid 1 above, "perfect representation."

Now, let's say instead that the Blue Party controls the state government, and they get to decide how the lines are drawn. Rather than draw districts vertically they draw them horizontally, so that in each district there are six Blues and four Reds. You can see that in grid 2 above, "compact but unfair."

With a comfortable Blue majority in this state, each district elects a blue candidate to the House. The Blues win 5 seats and the Reds don't get a single one. Oh well! All's fair in love and politics.

In the real world, the results of this latter scenario are similar to what we see in New York, though there are no good examples of where a majority party gives itself a clean-sweep. In 2012, Democrats received 66 percent of the popular House vote. But they won 21 out of 27 House seats, or three more than you'd expect from the popular vote alone. And from a purely geometric standpoint, New York's congressional districts aren't terribly irregular -- at least not compared to other states.

Finally, what if the Red Party controls the state government? The Reds know they're at a numeric disadvantage. But with some creative boundary drawing -- the type you see in grid 3, "neither compact nor fair" -- they can slice the Blue population up such that they only get
a majority in two districts. So despite making up 40 percent of the population, the Reds win 60 percent of the seats. Not bad!

In the real world, this is similar to what we see in Pennsylvania. In 2012, Democrats won 51 percent of the popular House vote. But the only won 5 out of 18 House seats -- fewer than one third. This was because when Pennsylvania Republicans redrew the state's Congressional districts, they made highly irregular districts that look like the one below, PA-7, one of the most geographically irregular districts in the nation.

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Now, this exercise is of course a huge simplification. In the real world people don't live in neatly-ordered grids sorted by political party. But for real-world politicians looking to give themselves an advantage at redistricting time, the process is exactly the same, as are the results for the parties that gerrymander successfully.

The easiest way to solve this issue, of course, would be to take the redistricting process out of human hands entirely. There is already software capable of doing just that -- good luck getting any politicians to agree to it, though.

The process of redrawing district lines to give an advantage to one party over another is called "gerrymandering." Here's how it works. (Daron Taylor/The Washington Post)

