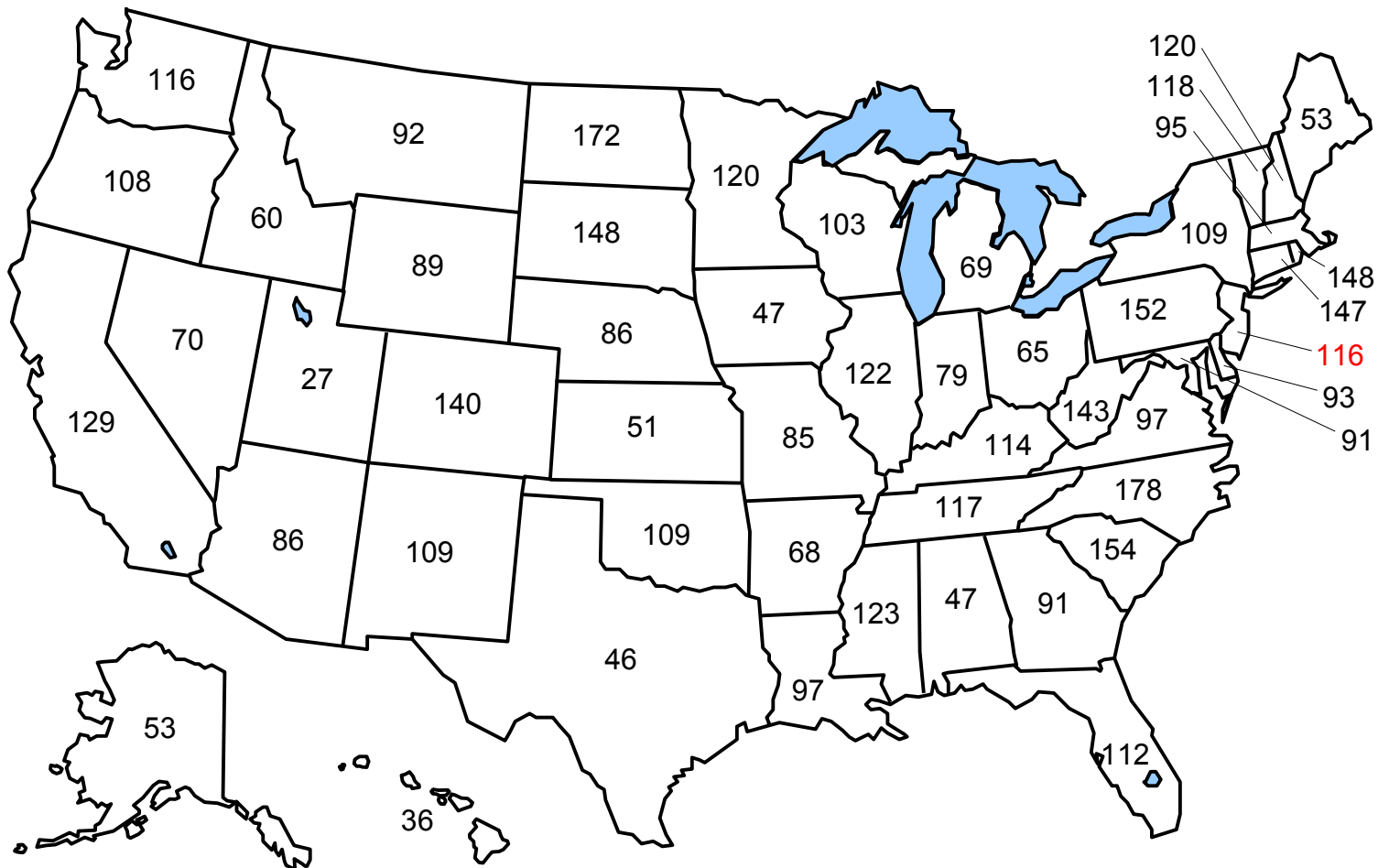# U is for... UNITED STATES OF ALGEBRA

I have assigned the values 1 through 26 to the letters A through Z in some scrambled order. I then calculated the "weight" of each state's name by adding up the values of all of the letters in the name (spaces in the names were ignored). Can you determine the value of each letter?

$$\frac{2 \times (F+I+N+D) \times (T+H+E) \times (U+P+I+E+C+E) - 20481}{10000}$$

$$\frac{3 \times (O+N) \times (A) \times (G+R+A+Y) \times (B+R+I+D+G+E) + 119579}{-10000}$$