August 24, 2024
Mr. Rasmusen's Math Class

The Distributive Property

   The distributive property is about how addition and multiplication can be combined and taken apart. The basic idea is illustrated by:

5*(8+3) = 5*8 + 5*3
          = 40 + 15
          = 55

   In that example, you get to do two single digit multiplications, 5*8 and 5*3 instead of one double digit one, 5*11 = 55.

   We can illustrate this as a rectangle:

   Another example is

5*603 = 5*(600 + 3) = 5*600 + 5*3
          = 3,000 + 15
          = 3,015

 Here is a more complicated example:

23 * 78 = (20+3)*(70+8)

          = 20*(70+8) + 3*(70+8)

          = 20*70 + 20*8 + 3*70 + 3*8

          = 1400 + 160 + 210 + 24