Russian Peasant Multiplication

- To multiply two numbers A and B

- Iteratively divide A by two (taking the floor if it's odd) and multiply B by 2 until A = 1

- Example: 22 x 12 = 264

22	x	12
11	x	24
5	x	48
2	x	96
1	x	192

- Add all of the "B" values for which the corresponding "A" values were **odd.**

- Example:

22	x	12
11	**x**	**24**
5	**x**	**48**
2	x	96
1	**x**	**192**

24 + 48 + 192 = 264

Why is works?

$(2k+1)*n = k*(2n) + n$