An Algorithm for Multiplying by Five

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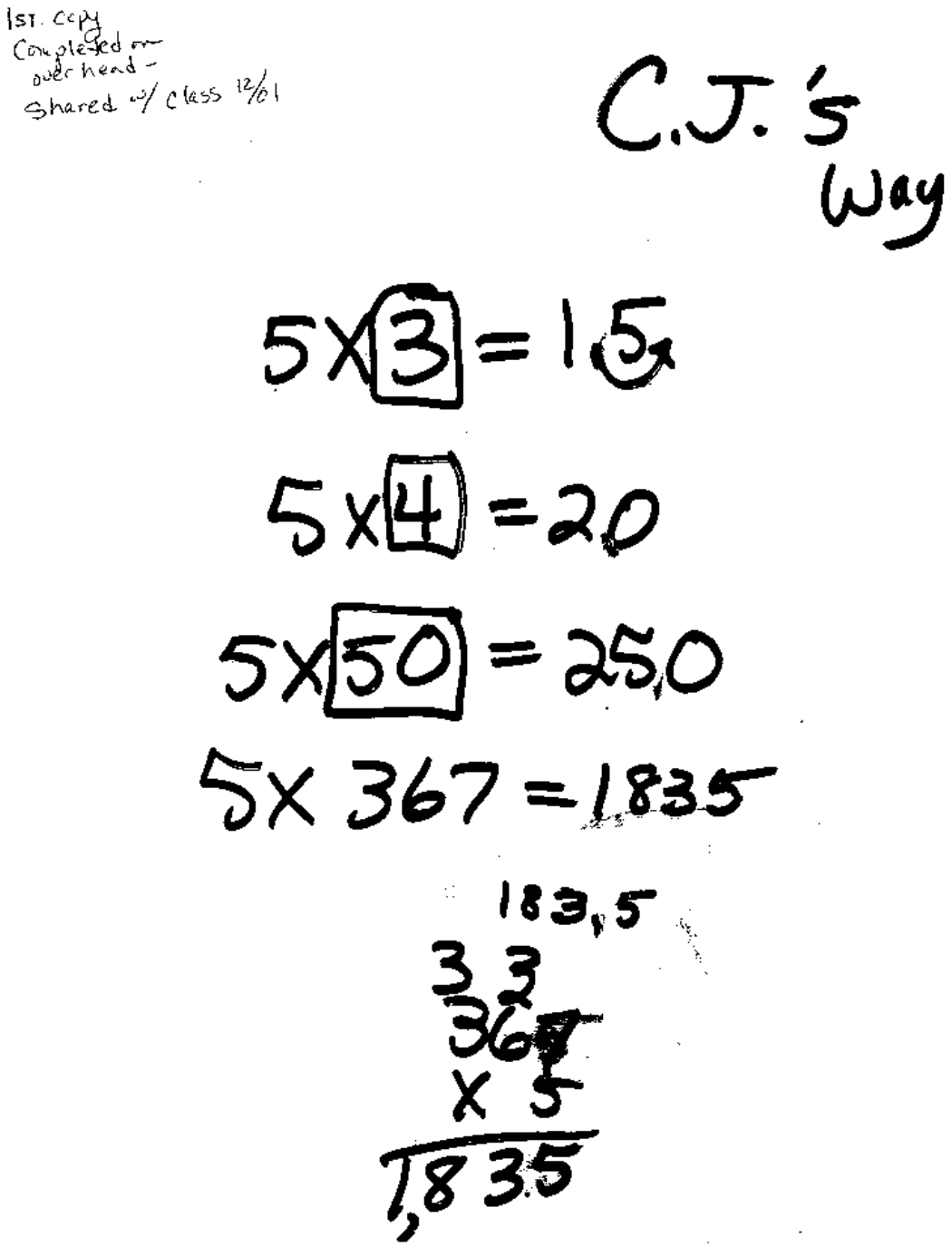


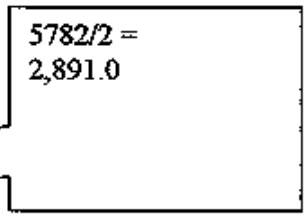
My multiplication by 5's algorithm

Typed by C.J.

When doing [redacted] # * by 5, (like 3*5 for instance) you just cut the # your * 5 by in half (3 cut in half is 1.5) move the decimal one place to the right (15.) and that is your answer.

Examples:

(1)
5*7=
one half of 7 is 3.5
with the decimal moved over its 35
5*7=35



(2)
5*

one half of 5782 is 2891.0
with the decimal moved over is 28,910.
5*5782=28910

This algorithm works with any range of numbers, including decimals. I have not tested negative numbers, but be my guest to try. I think it will work.

Here is a example of a decimal equation:

(3)
5 * .125
one half of .125 is .0625
with the decimal moved over is .625
5 * .125=.625

How does it work?

It works like this, when multiplying by 10, you just add a zero to the product, so when multiplying by 5 for this algorithm, cutting the other factor in half would be the same theory.

In base ten multiplication equations, you can always multiply a number by 10 and just adding a zero to the right hand side would get you an answer. With the number 5, which is half of ten, you can just divide the other factor by two or in half. Then, moving the decimal over one digit to the right, would give you the answer.