

# Lattice Multiplication with Decimals

Step-by-Step



$$3.42 * 6.9 =$$



Ok! I know how to do Lattice, but I don't remember how to multiply with decimals!!!

$$3.42 * 6.9$$

Make a grid the exact size of your problem. A 2 digit number times a 3 digit number gets a 2 x 3 grid. Draw a diagonal line in each box.

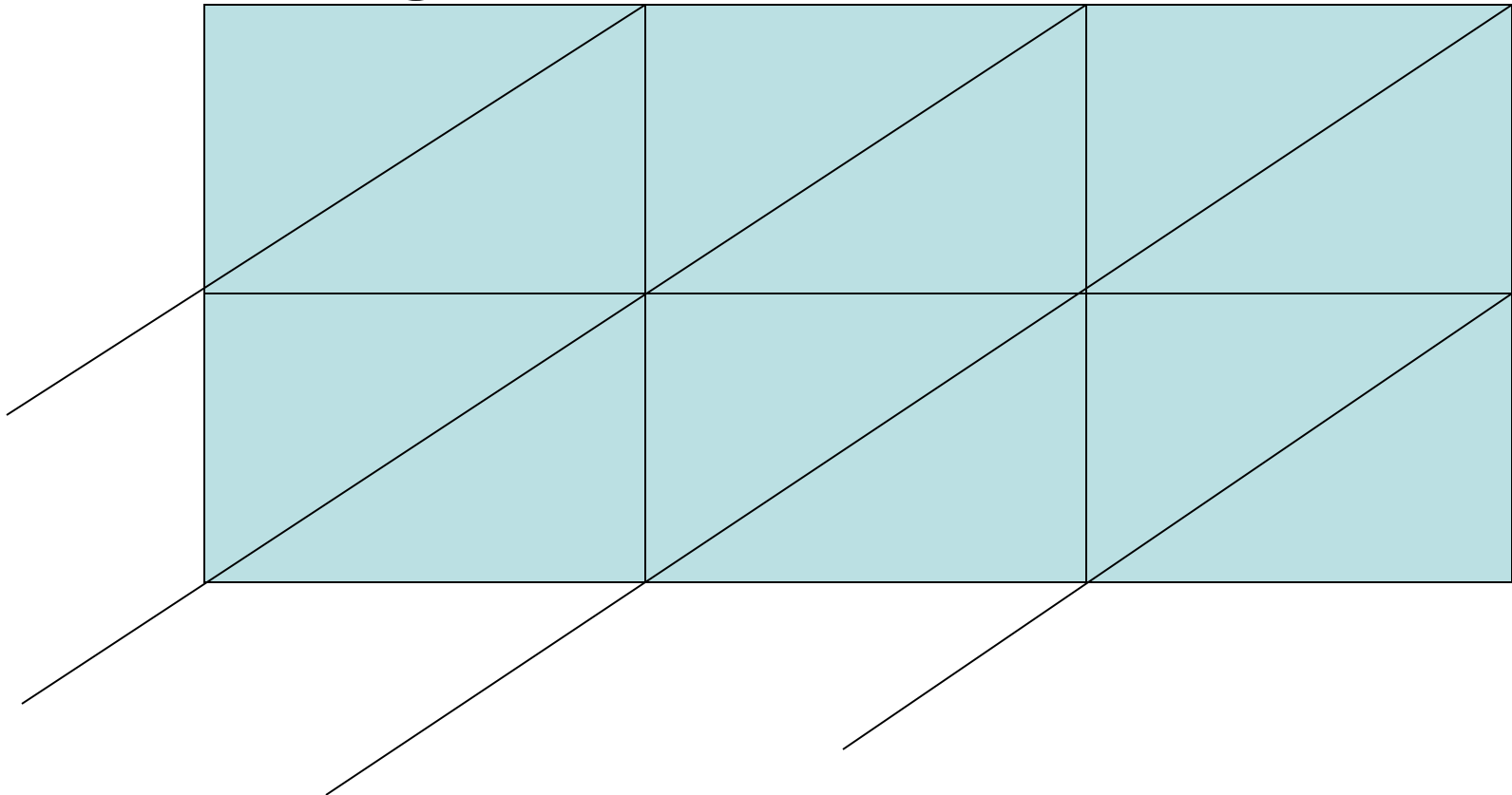
3

4

2

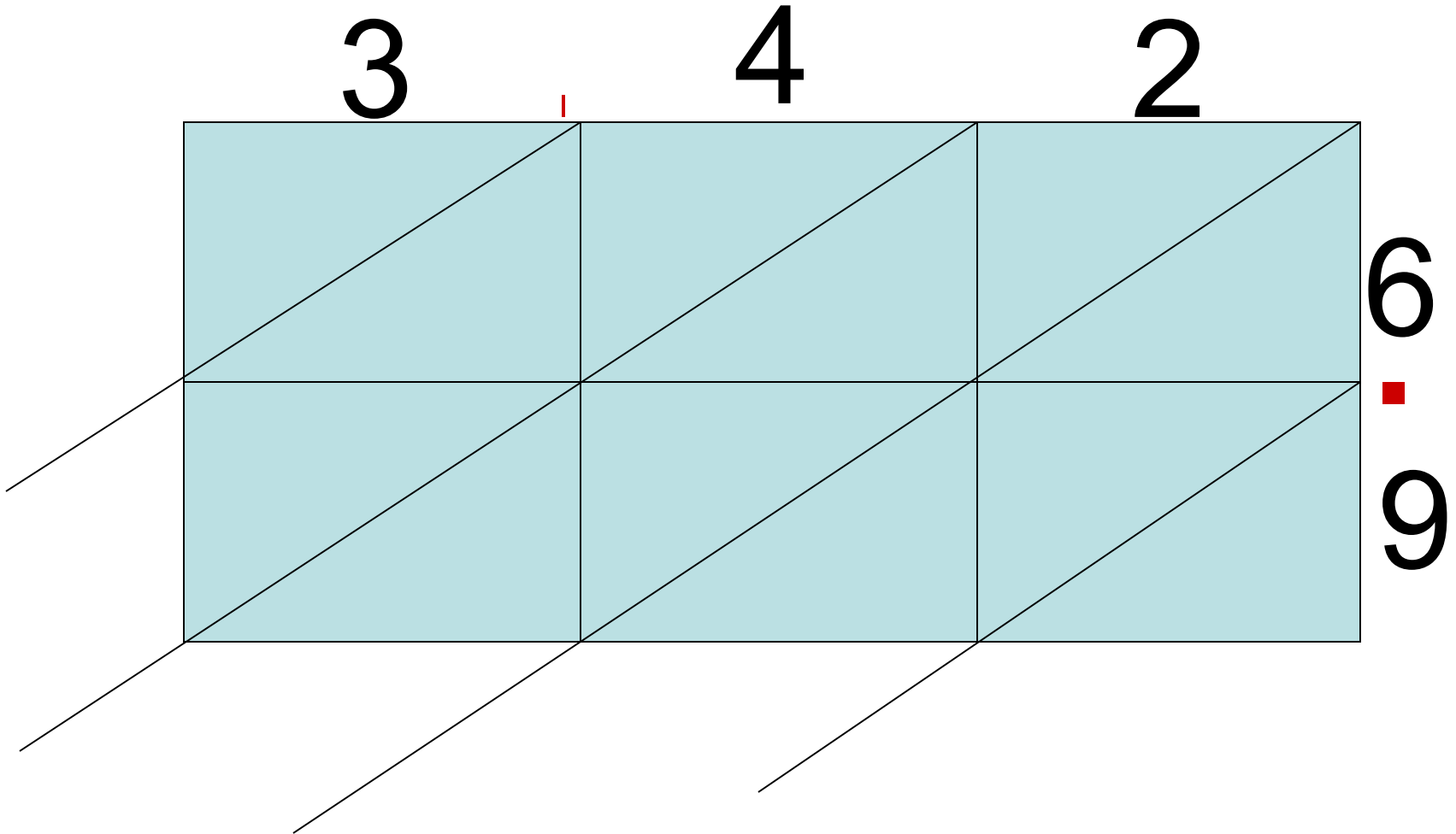
6

9



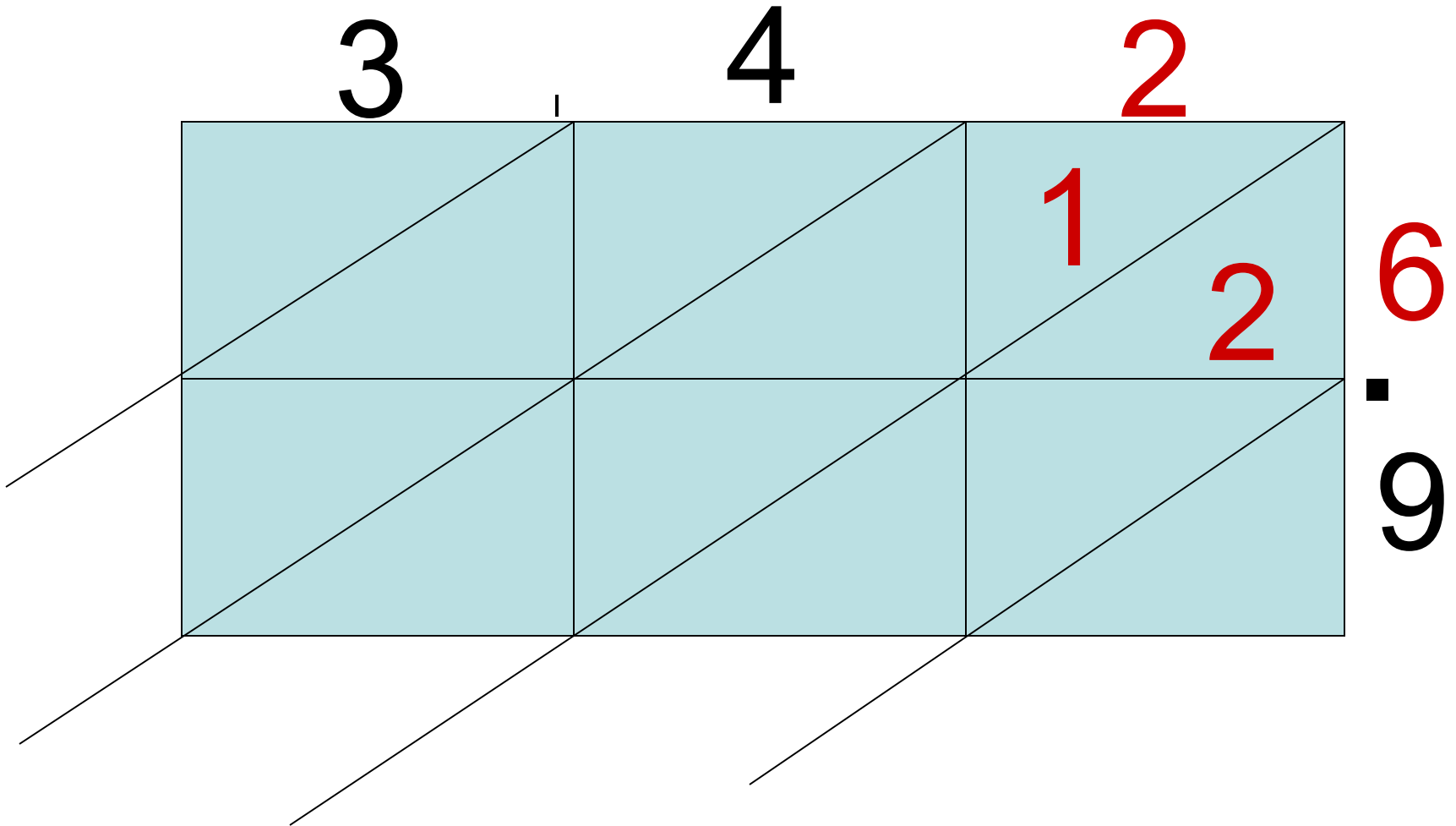
$$3.42 * 6.9$$

Place the decimal point above/beside the line in the grid.



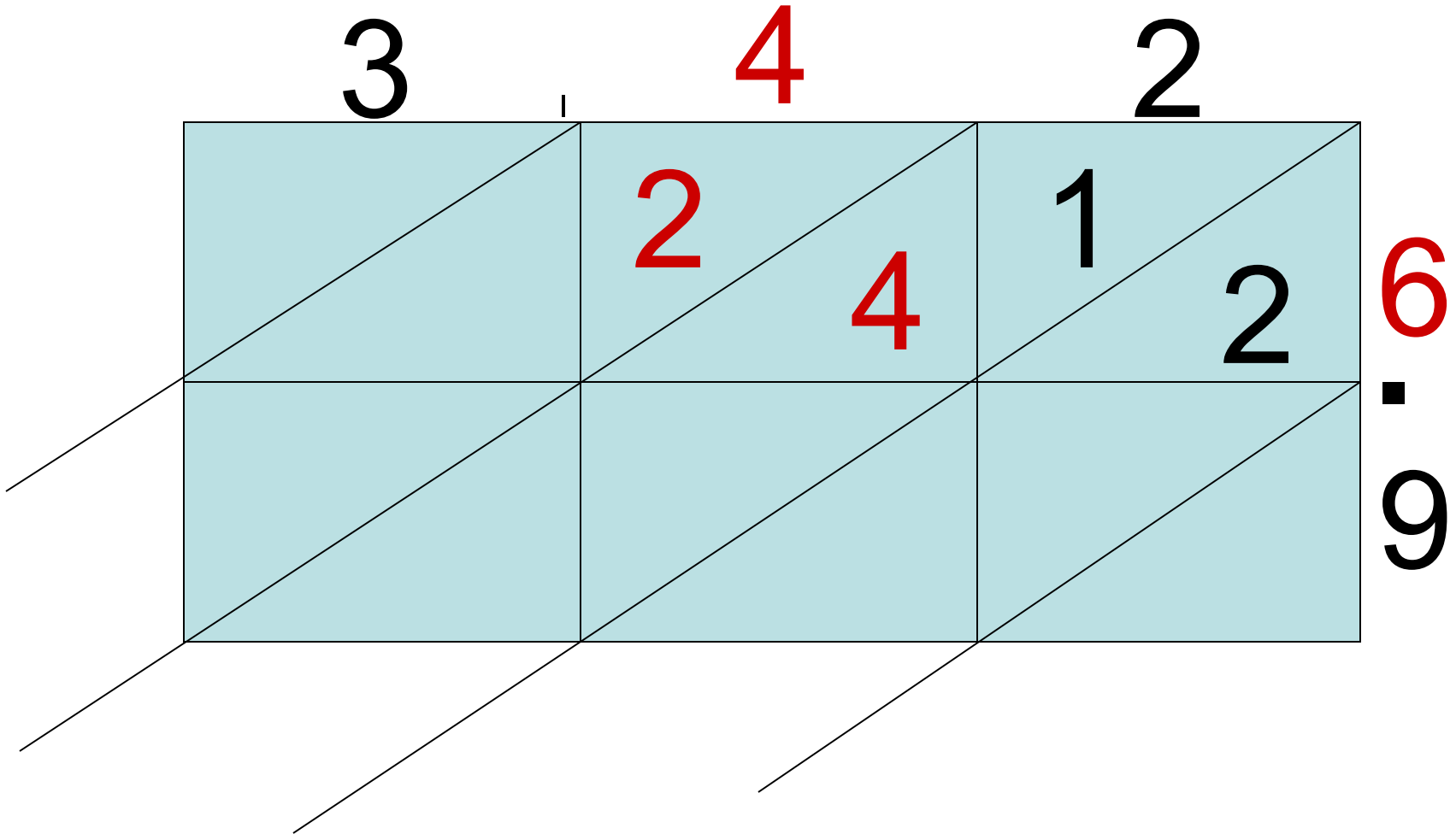
$$3.42 * 6.9$$

Multiply  $6 * 2$  and place the answer in the grid where the lines meet.



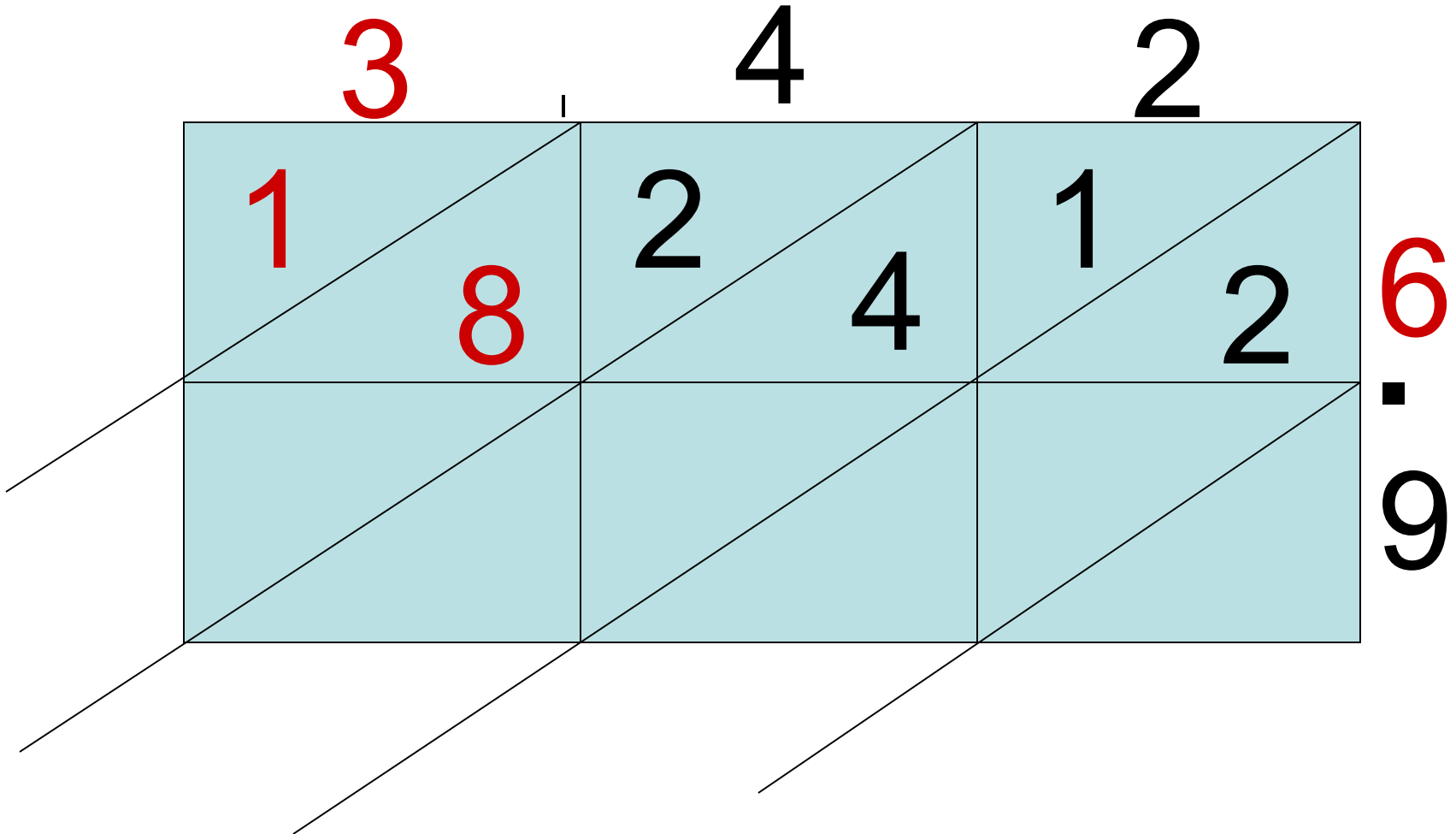
$$3.42 * 6.9$$

Multiply 4 \* 6 and place the answer in the grid where the lines meet.



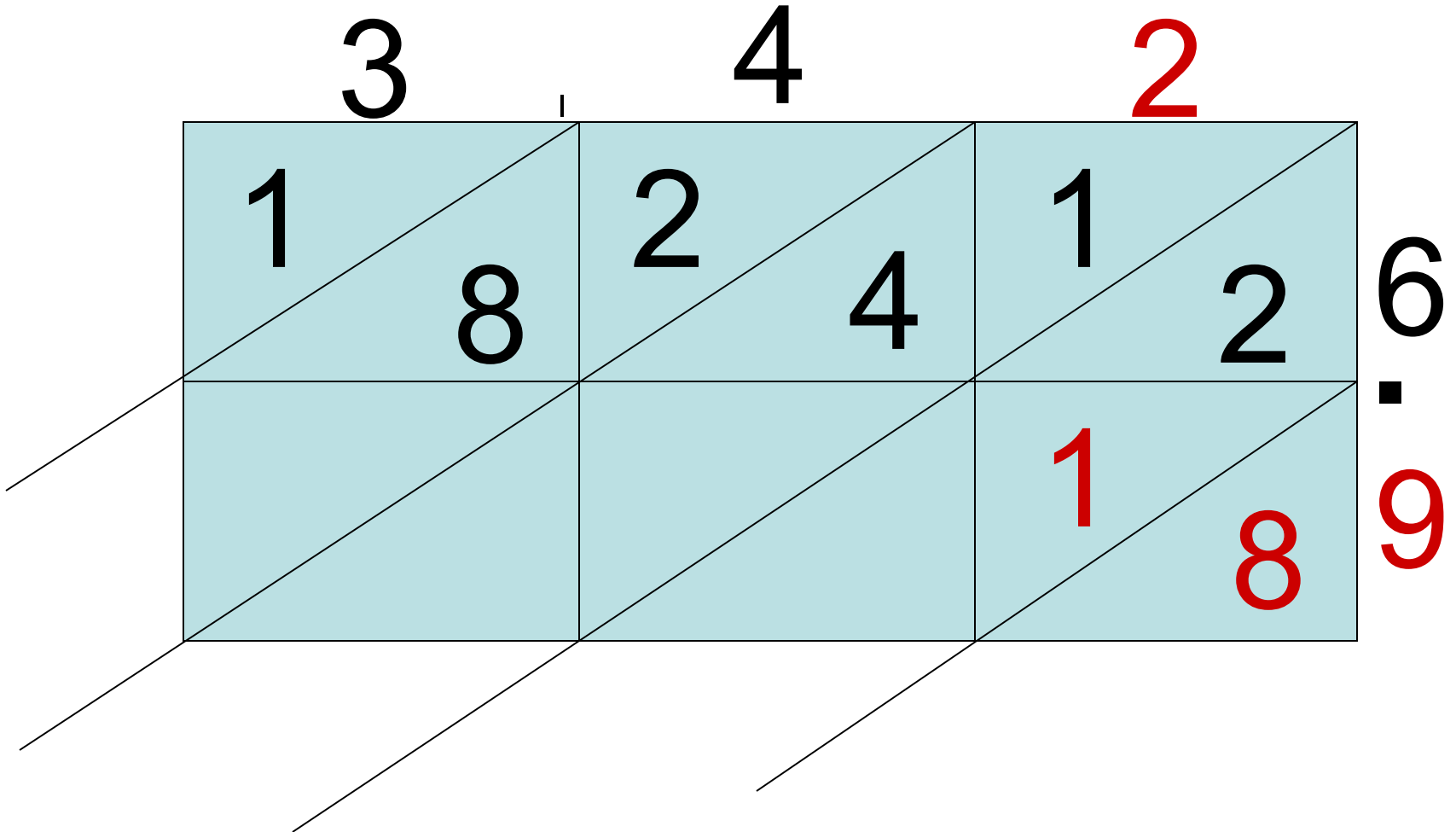
$$3.42 * 6.9$$

Multiply 3 \* 6 and place the answer in the grid where the lines meet. Use a zero as a place holder.



$$3.42 * 6.9$$

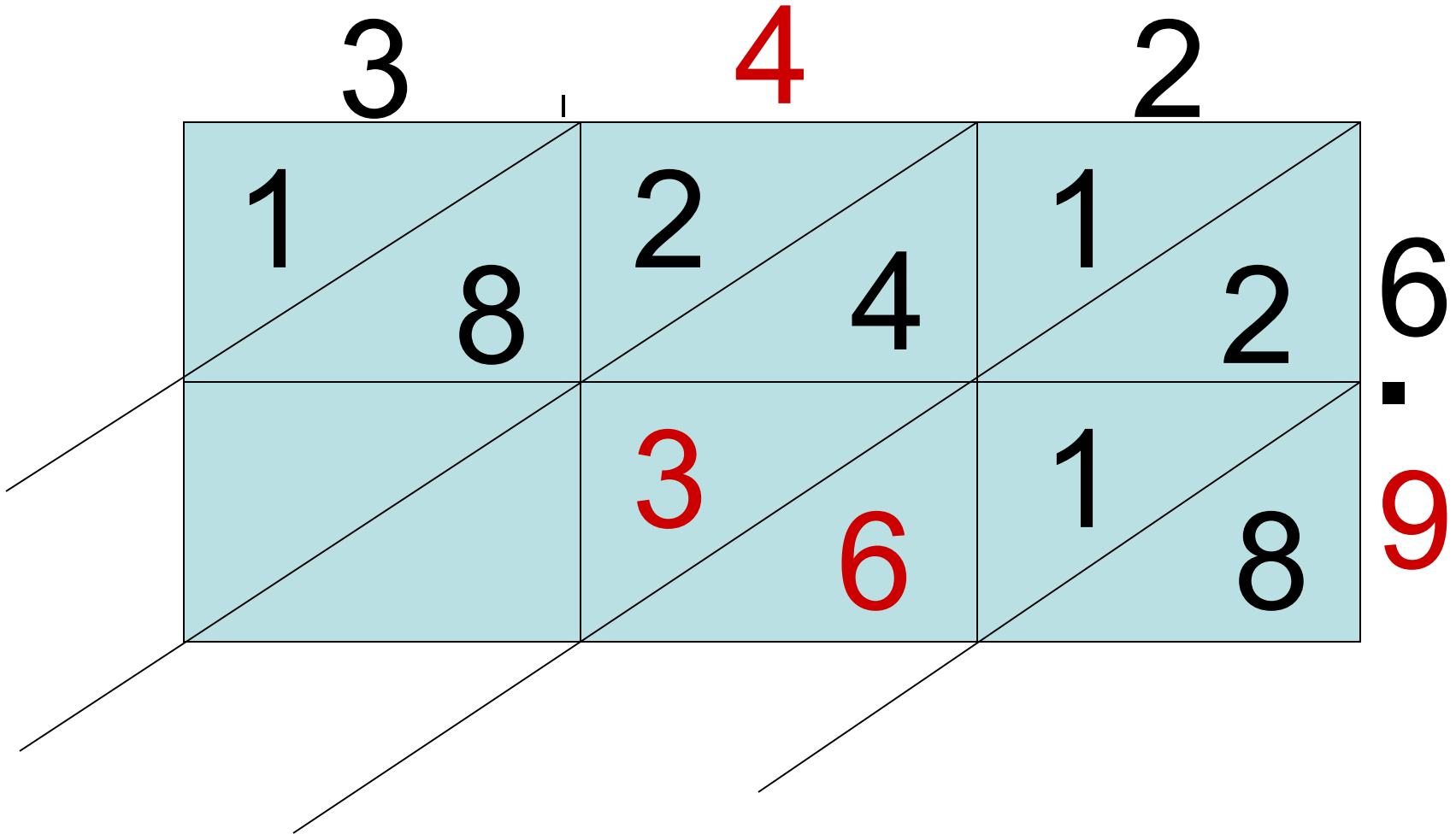
Multiply 2 \* 9 and place the answer in the grid where the lines meet.





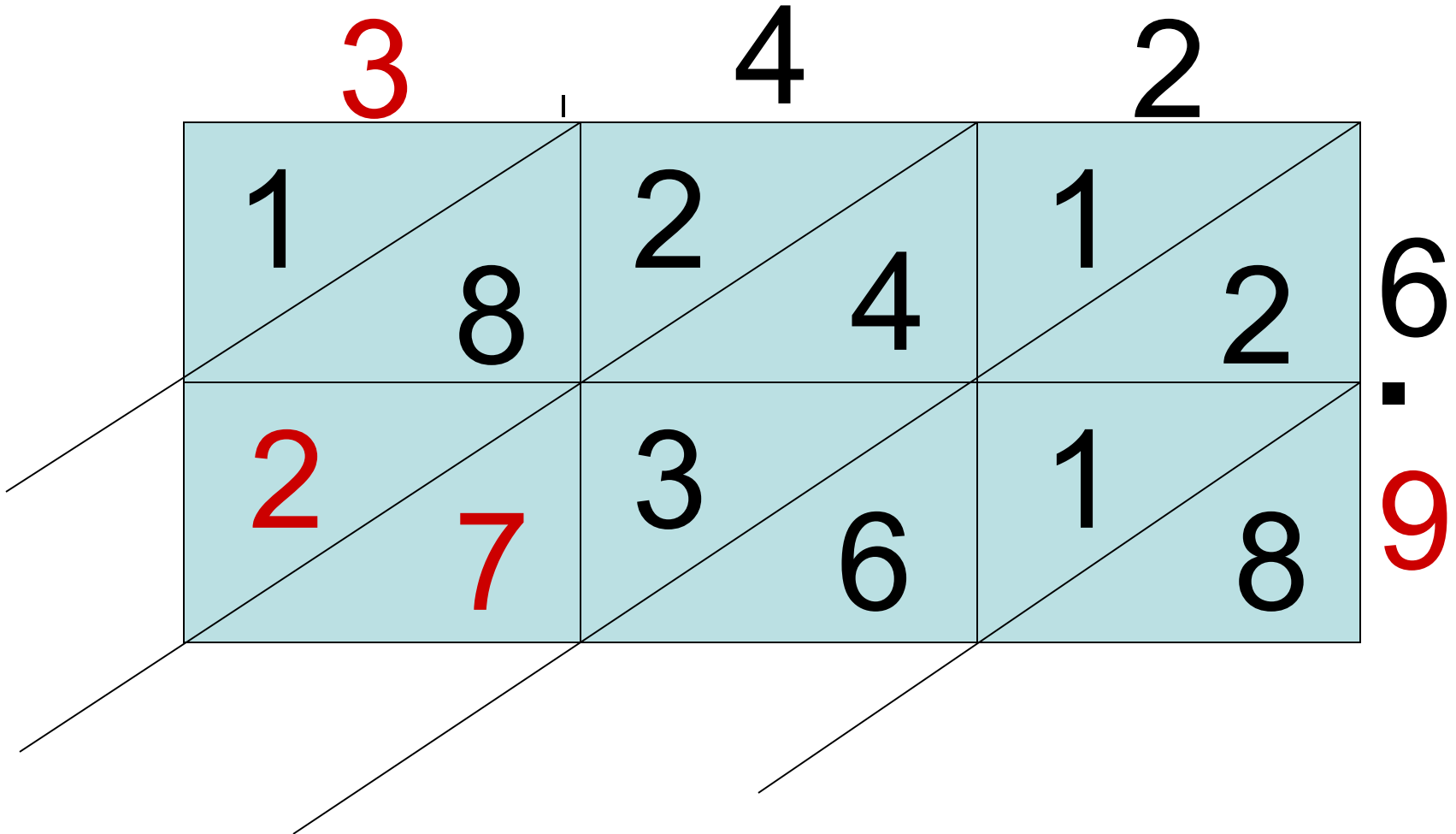
$$3.42 * 6.9$$

Multiply 4 \* 9 and place the answer in the grid where the lines meet.



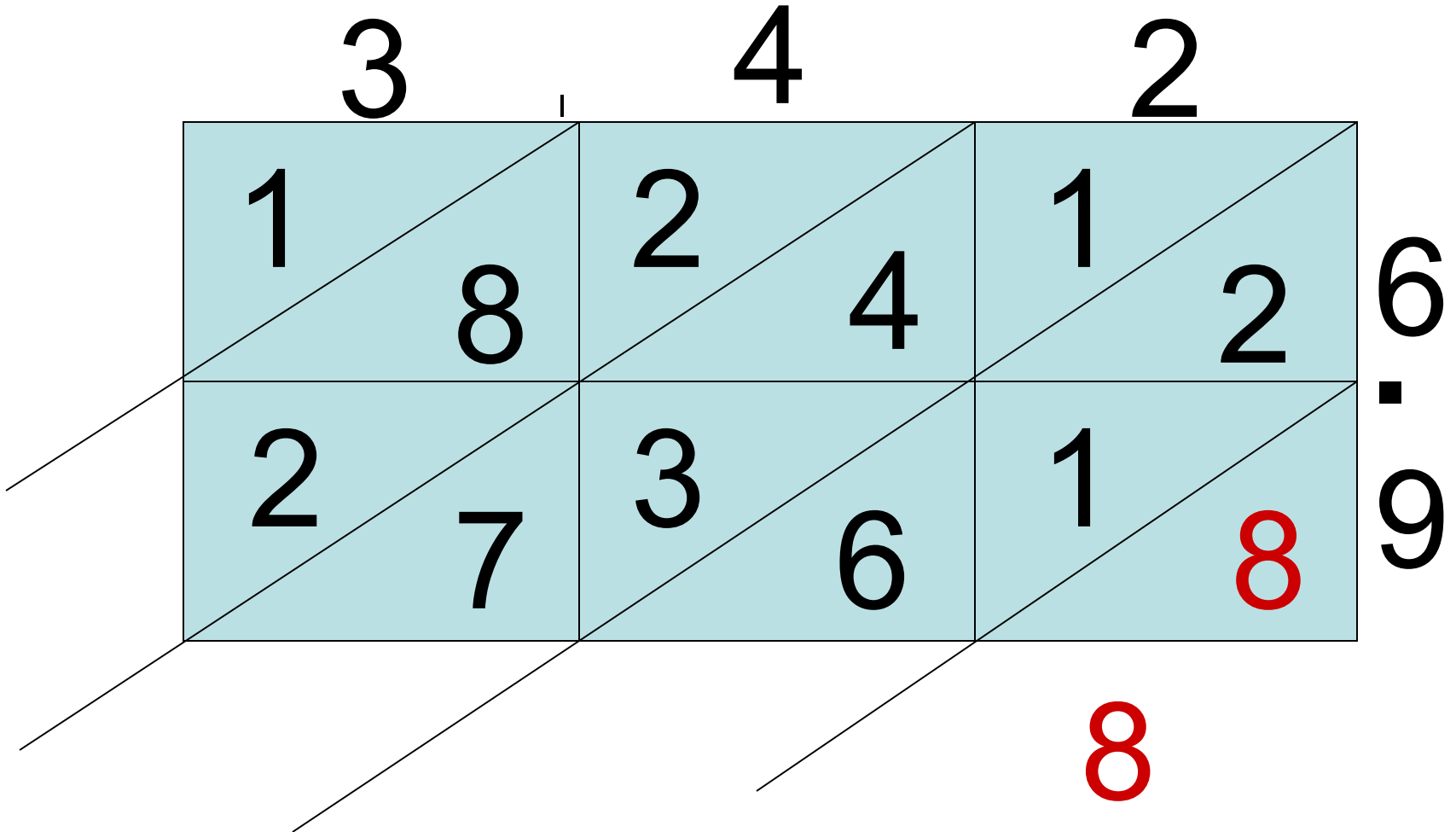
$$3.42 * 6.9$$

Multiply 3 \* 9 and place the answer in the grid where the lines meet.



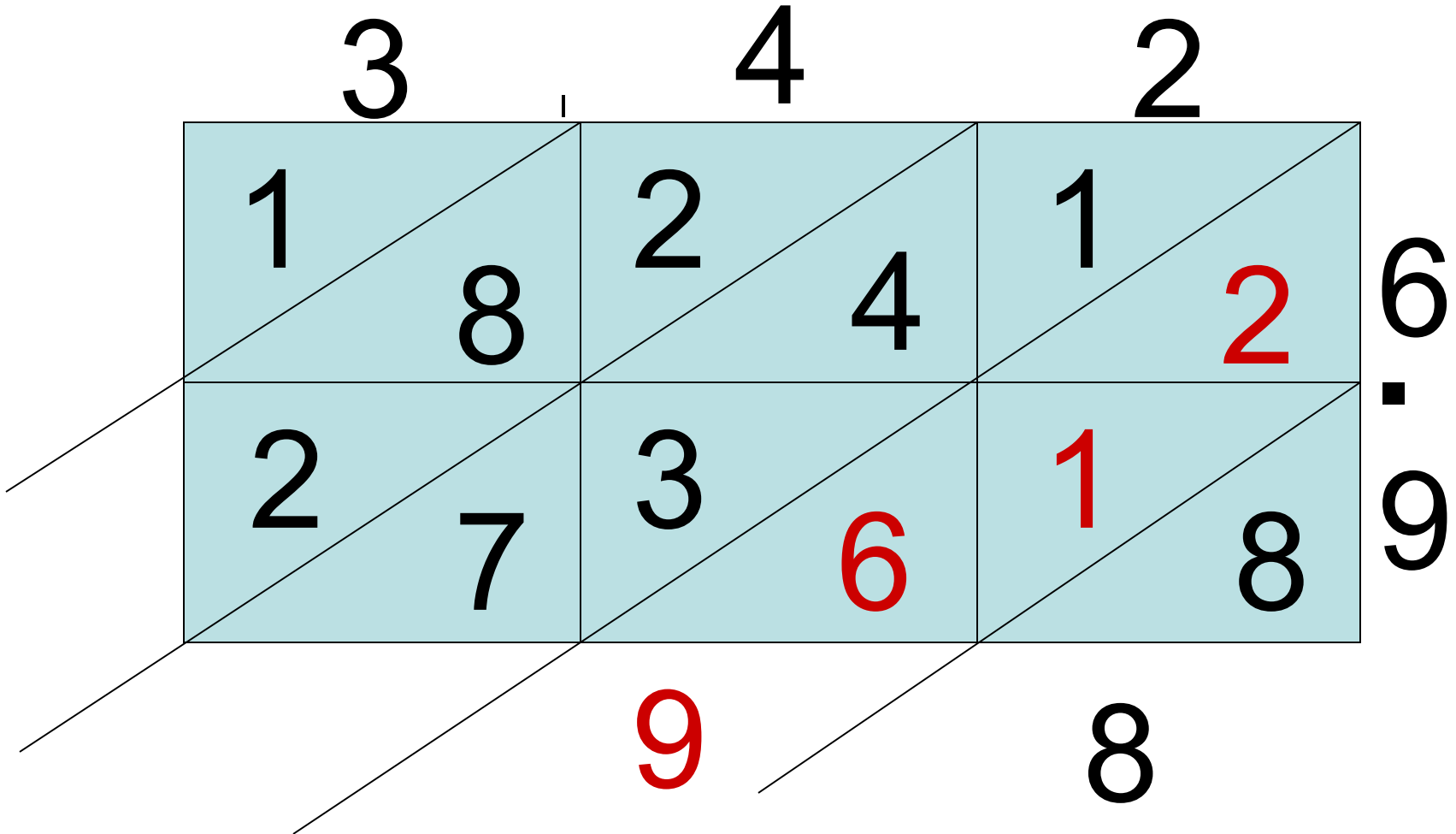
$$3.42 * 6.9$$

Now add the diagonals and place the answer below the grid. Be sure to carry to the next diagonal if you have a 2 digit answer.



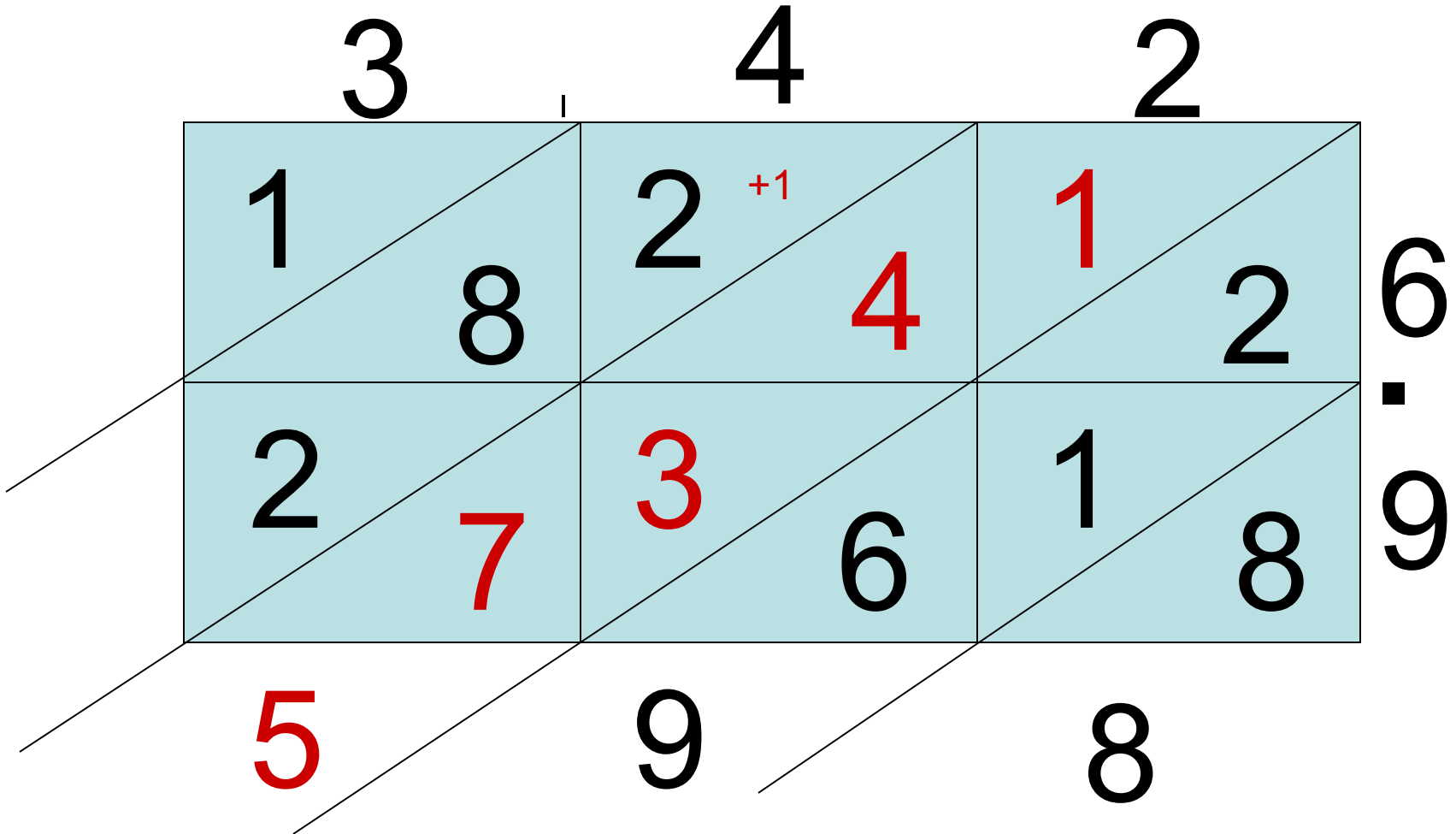
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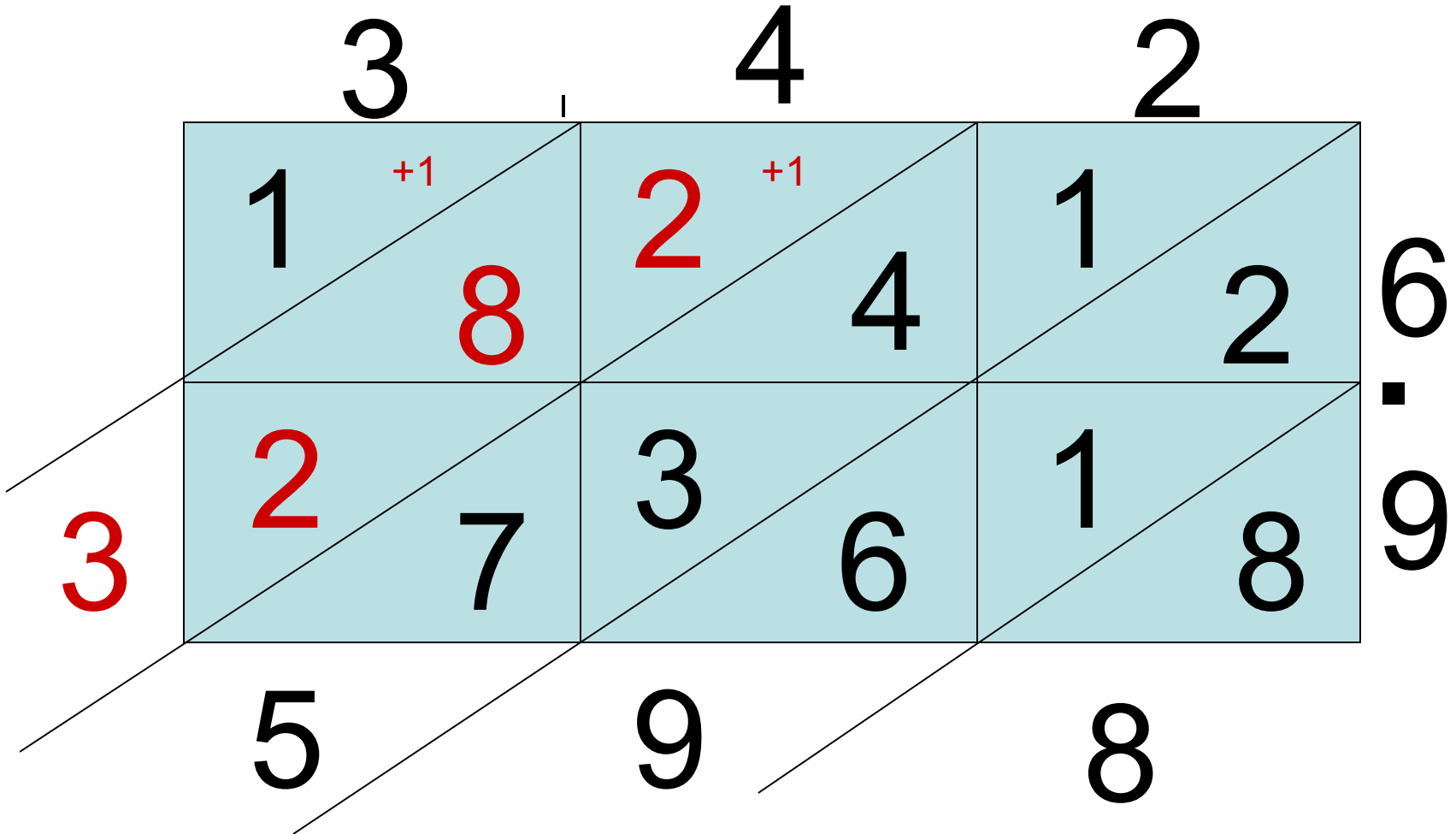
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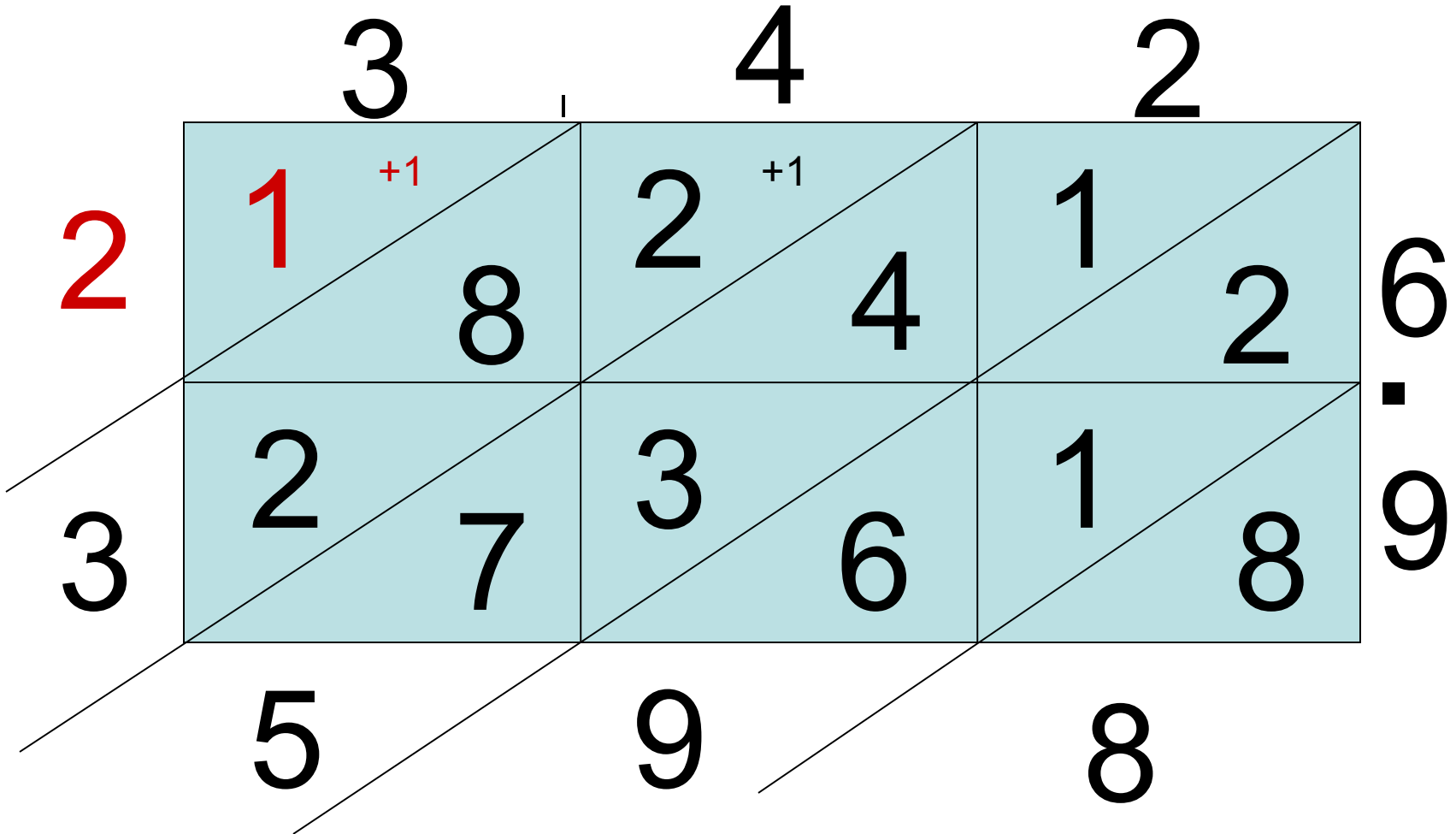
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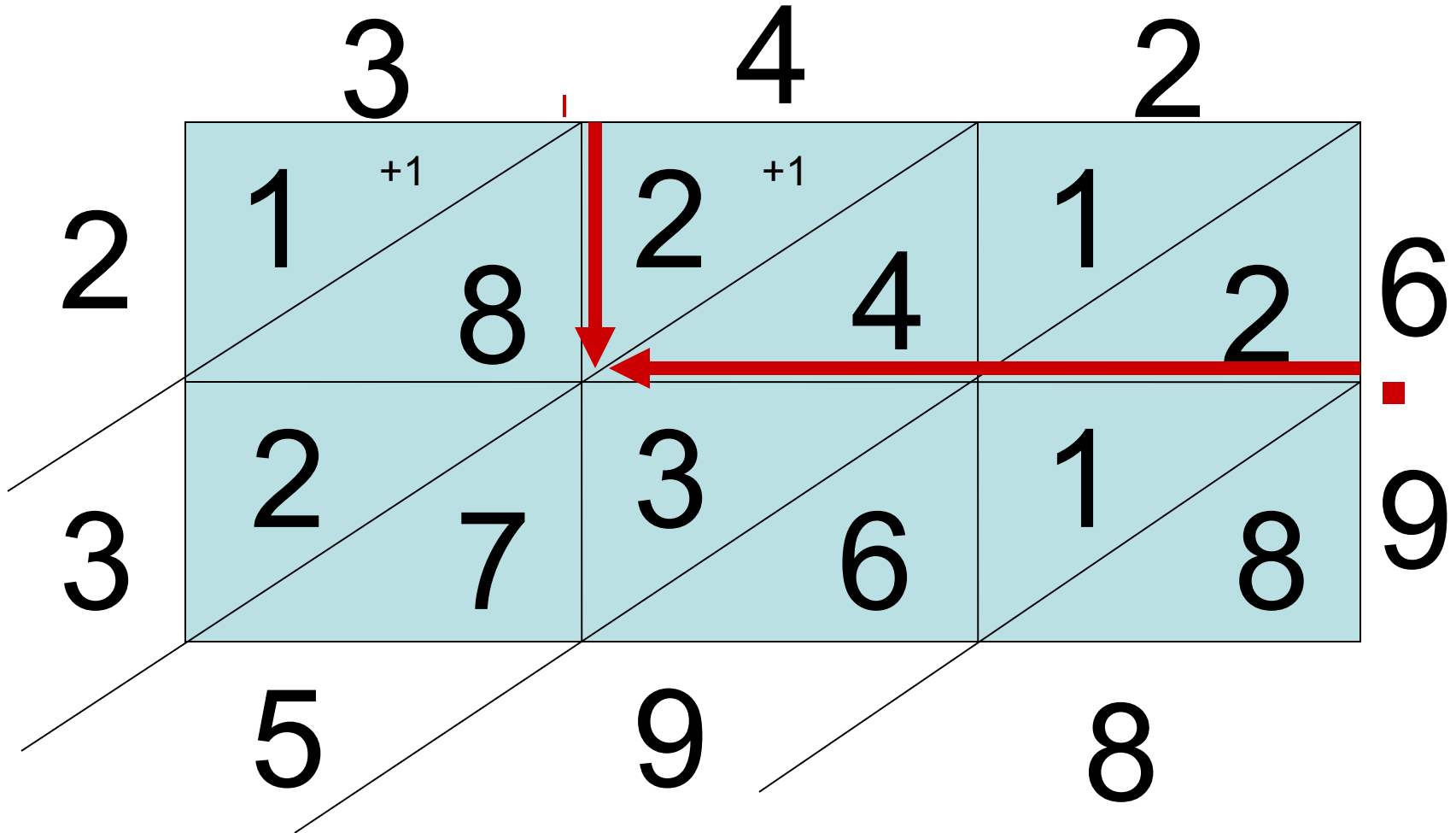
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$$3.42 * 6.9$$

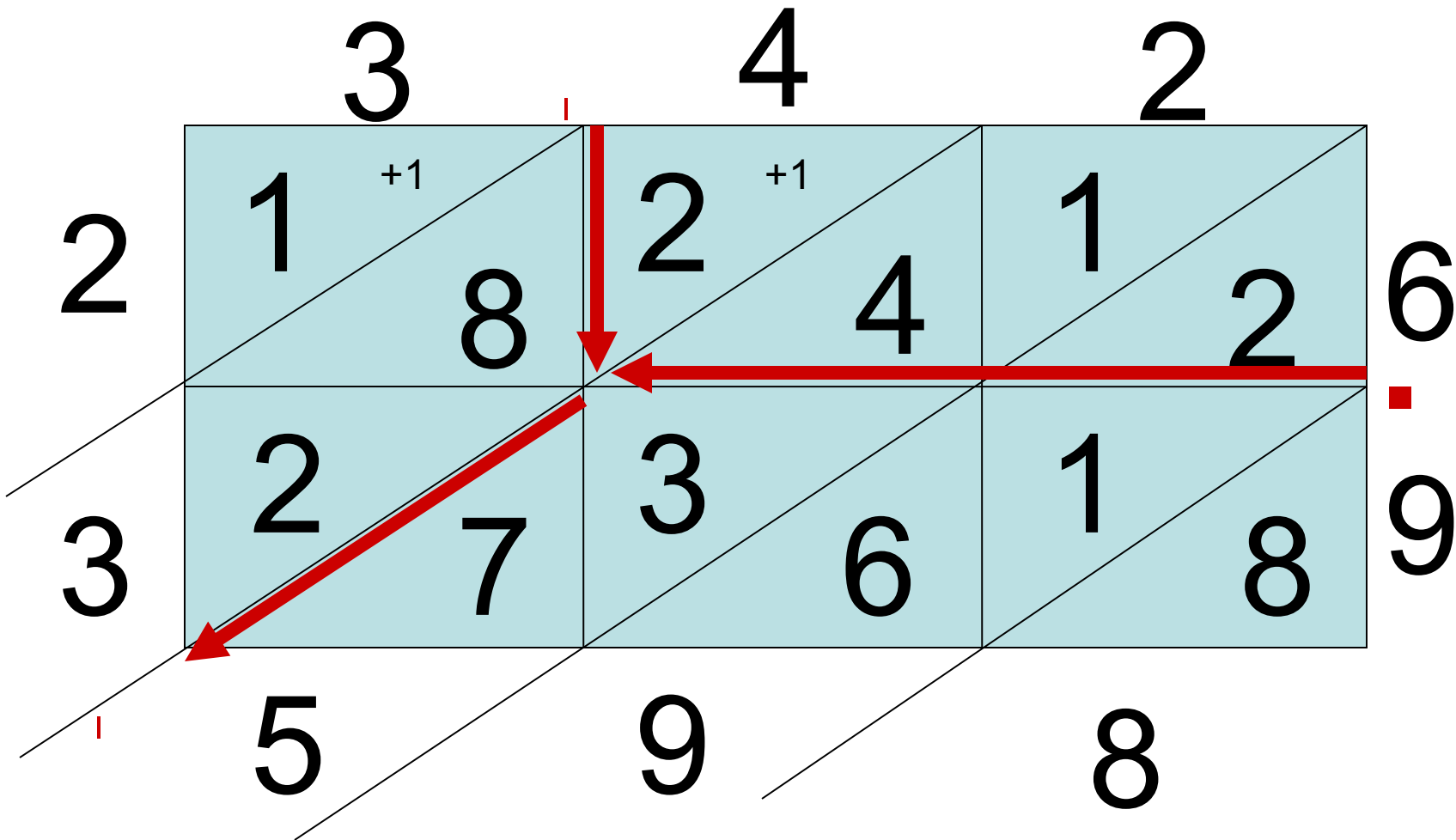
Now you need to place the decimal. Follow the lines until they meet.





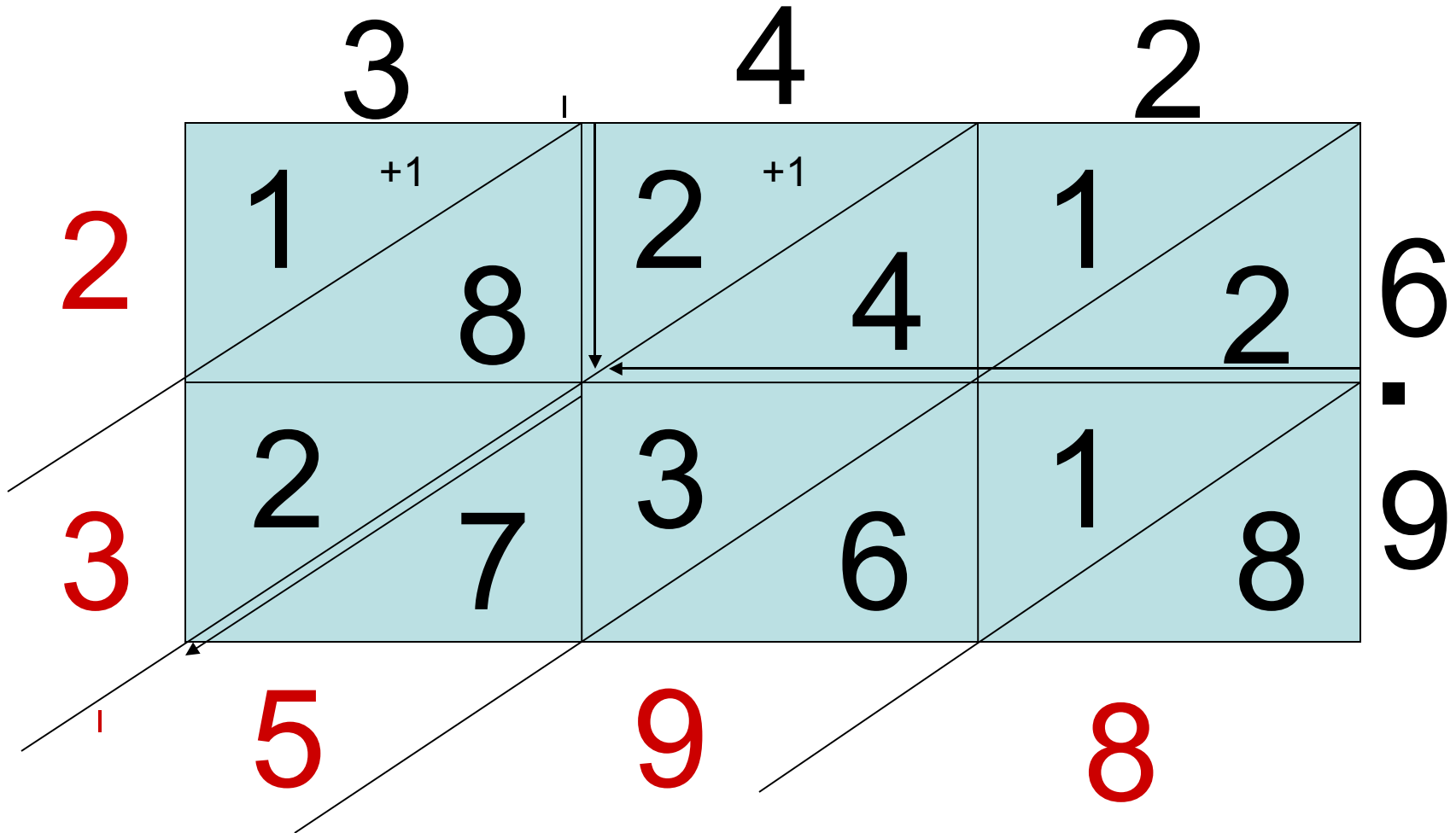
$$3.42 * 6.9$$

Now drop on the diagonal to place the decimal.



$$3.42 * 6.9$$

Your answer is 23.598!!



$$3.42 * 6.9 =$$

$$23.598$$

That is Soooo  
Cool!!!

Thanks!

