

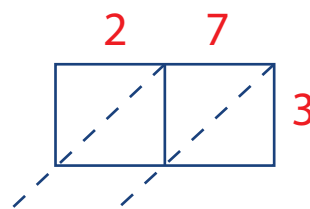
Let's Do Lattice Multiplication

Another way to figure out multiplication problems is with the use of a lattice. Remember: The number with the most digits determines the columns, and the number with the least amount of digits determines the rows.

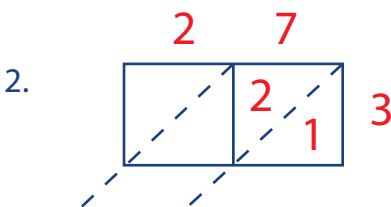
For example let's try: $3 \times 27 = \underline{\quad}$



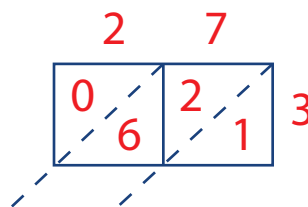
Draw a rectangle and divide it in half.



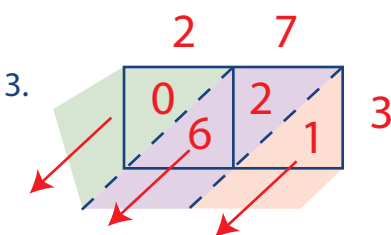
Place your numbers on the sides of the lattice. Draw diagonals at the corners.



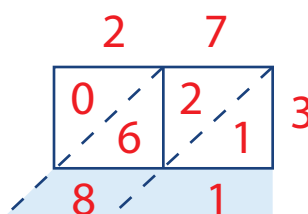
Multiply the ones place:
 $3 \times 7 = 21$
 Place the answer in the first set of triangles.



Multiply the tens place: $3 \times 2 = 6$
 Place a 0 in the tens place triangle. Place your answer in the ones place triangle.



Now add diagonally.



Your answer is 81.