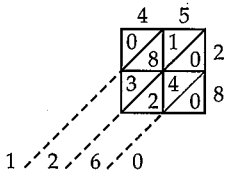### *The Lattice Algorithm*

Just as there was a lattice algorithm for addition, there is also one for multiplication. See whether you can figure out how it works for 45×28. Just as in the standard algorithm, there are four partial products in this algorithm. One of my grandmothers told me that this is how she learned multiplication when she was a little girl.

2. **a.** Do some more problems on your own until you feel confident using this algorithm. Note that this and the next algorithm can be applied to larger problems, such as multiplying two-digit by three-digit numbers or three-digit by three-digit numbers.
    b. As before, write directions for using this algorithm and give them to a friend. Have your friend multiply two numbers using your directions.
    c. As before, justify each step of this algorithm.