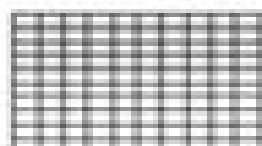


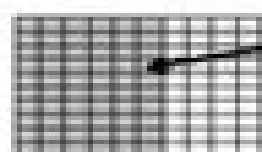
# Strategies for Multiplying Decimals by Decimals

$$0.4 \times 6 = 0.24$$

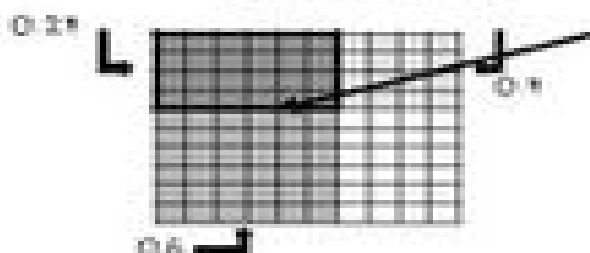
## Modeling with Hundredths Blocks



1. Take your first decimal number (your first factor) and shade in that many squares of your hundredths block vertically (up and down).



2. Take your second decimal number (your second factor) and shade in that many squares of your hundredths block in the opposite direction (side to side).



3. Count up the boxes that are overlapped by both shadings.

4. Write in proper decimal form.

## Standard Multiplication Algorithm

Step 1: Multiply as you would with whole numbers.

Step 2: Count how many digits you have after EVERY decimal point in the problem.

Step 3: Move the decimal point to the LEFT as many places as there are digits behind the decimal.

Step 1:

$$\begin{array}{r} .4 \\ \times 6 \\ \hline 24 \end{array}$$

Step 3:

$$\begin{array}{r} .4 \\ \times 6 \\ \hline .24 \end{array}$$

Step 2:

$$\begin{array}{r} .4 \leftarrow 1 \text{ place} \\ \times 6 \leftarrow 1 \text{ place} \\ \hline 24 \quad 2 \text{ places total} \end{array}$$

Final Answer:

$$\begin{array}{r} .4 \\ \times 6 \\ \hline .24 \end{array}$$