1. Draw an area model. Then, solve using the standard algorithm. Use arrows to match the partial products from your area model to the partial products in the algorithm.

a. $48 \times 35$

\[
\begin{array}{c}
40 & 8 \\
30 & 12.00 & 240 & 1440 \\
5 & 200 & 40 & +240 \\
& 1.080 & \\
\end{array}
\]

\[
48 \times 35 \\
\hline
240 \\
1440 \\
1.080 \\
\] 

b. $648 \times 35$

\[
\begin{array}{c}
600 & 40 & 8 \\
30 & 18,000 & 1,200 & 240 & 19,440 \\
5 & 3000 & 200 & 40 \\
& +3,240 \\
\end{array}
\]

\[
648 \times 35 \\
\hline
3240 \\
19,440 \\
22,680 \\
\]

2. Solve using the standard algorithm.

a. $758 \times 92$

\[
\begin{array}{c}
758 \\
92 \\
\hline
5716 \\
+67220 \\
\hline
91736 \\
\end{array}
\]

b. $958 \times 94$

\[
\begin{array}{c}
958 \\
94 \\
\hline
3832 \\
+86220 \\
\hline
90052 \\
\end{array}
\]

Lesson 6: Connect area models and the distributive property to partial products of the standard algorithm with renaming.
3. Carpet costs $16 a square foot. A rectangular floor is 16 feet long by 14 feet wide. How much would it cost to carpet the floor?

\[
\begin{array}{c|c|c|c}
10 & 100 & 60 \\
4 & 40 & 24 & 64 \\
\hline
160 & 224 & \text{sq feet} \\
\end{array}
\]

Area = 224 sq feet

It will cost $3,380.

4. General admission to The American Museum of Natural History is $19.
   a. If a group of 125 students visits the museum, how much will the group's tickets cost?

\[
\begin{array}{c|c|c|c}
19 & 19 & 19 & \text{?} \\
125 & \text{students} \\
\hline
\end{array}
\]

It will cost $2,375.

b. If the group also purchases IMAX movie tickets for an additional $4 per student, what is the new total cost of all the tickets? Write an expression that shows how you calculated the new price.

\[
\begin{array}{c|c|c|c}
\$2,375 & \text{4} & \text{4} & \text{4} \\
125 \text{ students} \\
\hline
\text{NH} & \text{IMAX} \\
\$125 & \text{\$500} \\
\hline
\text{\$2,875} \\
\end{array}
\]

(125 x 4) + $2,375 = $2,875 It will now cost $2,875.