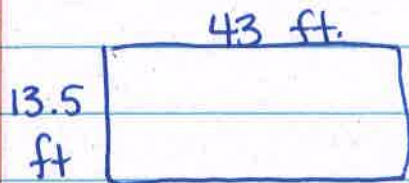


M2L11-12

Application Problem

The area of the patio is 580.5 ft²
He will need 581 tiles.



$$\text{Area} = \text{length} \times \text{width} (A = l \times w)$$
$$A = 13.5 \times 43$$

$$\begin{array}{r} 13.5 \times 10 \rightarrow 135 \text{ tenths} \\ \times 43 \\ \hline 405 \\ 5400 \text{ tenths} \\ \hline 5805 \xrightarrow{\div 10} 580.5 \end{array}$$

$$12 \text{ in} = \frac{1}{12} \text{ ft}$$

E 12 x 1 in

C 12 x $\frac{1}{12}$ ft

A $\frac{12}{12} = 1$

M2 L11-12: Multiplying Decimal Fraction by Whole Number.

$$7.38 \times 41 \approx 7 \times 40 = 280$$

$$\begin{array}{r} 7.38 \xrightarrow{\times 100} \overset{1}{7} \overset{3}{38} \text{ hundredths} \\ \times \quad 41 \\ \hline 1,738 \\ + 29520 \text{ hundredths} \\ \hline 30258 \xrightarrow{\div 100} \boxed{302.58} \end{array}$$

$$8.26 \times 128 \approx 8 \times 100 = 800$$

$$\begin{array}{r} 8.26 \xrightarrow{\times 100} \overset{8}{8} \overset{2}{2} \overset{6}{6} \text{ hundredths} \\ \times 128 \\ \hline 1,6608 \\ 16520 \\ + 82600 \\ \hline 105728 \text{ hundredths} \xrightarrow{\div 100} 1057.28 \end{array}$$

$$82.51 \times 63 \approx 80 \times 60 = 4800$$

$$\begin{array}{r} 82.51 \xrightarrow{\times 100} \overset{8}{8} \overset{2}{2} \overset{5}{5} \overset{1}{1} \text{ (hundredths)} \\ \times \quad 63 \\ \hline 24753 \\ + 495060 \text{ (hundredths)} \\ \hline 519813 \xrightarrow{\div 100} \boxed{5198.13} \end{array}$$

Name _____

Date _____

1. Estimate the product. Solve using the standard algorithm. Use the thought bubbles to show your thinking. (Draw an area model on a separate sheet if it helps you.)

a. $1.38 \times 32 \approx 1 \times 30 = 30$

$1.38 \times 32 = 44.16$

Think!
 $1.38 \times 100 = 138$

$$\begin{array}{r}
 1.38 \\
 \times 32 \\
 \hline
 276 \\
 +4140 \\
 \hline
 4416 \text{ hundredths}
 \end{array}$$

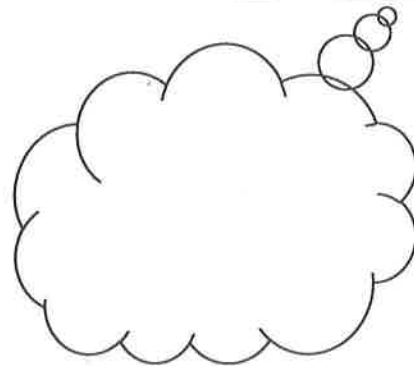
Think! 4,416 is 100 times too large! What is the real product?
 $4,416 \div 100 = 44.16$

b. $3.55 \times 89 \approx \underline{\quad} \times \underline{\quad} = \underline{\quad}$

$3.55 \times 89 = \underline{\quad}$



$$\begin{array}{r}
 3.55 \\
 \times 89 \\
 \hline
 \end{array}$$



2. Estimate. Then, solve using the standard algorithm. Use a separate sheet to draw the area model if it helps you.

a. $1.23 \times 12 \approx \underline{1} \times \underline{10} = \underline{10}$

$$\begin{array}{r} 1.23 \\ \times 12 \\ \hline 246 \\ + 1230 \\ \hline 1476 \end{array} \xrightarrow{\div 100} 14.76$$

b. $1.3 \times 26 \approx \underline{1} \times \underline{30} = \underline{30}$

$$\begin{array}{r} 1.3 \\ \times 26 \\ \hline \end{array}$$

c. $0.23 \times 14 \approx \underline{\quad} \times \underline{\quad} = \underline{\quad}$

d. $0.45 \times 26 \approx \underline{0.5} \times \underline{30} = \underline{15}$

e. $7.06 \times 28 \approx \underline{\quad} \times \underline{\quad} = \underline{\quad}$

f. $6.32 \times 223 \approx \underline{\quad} \times \underline{\quad} = \underline{\quad}$

g. $7.06 \times 208 \approx \underline{\quad} \times \underline{\quad} = \underline{\quad}$

h. $151.46 \times 555 \approx \underline{\quad} \times \underline{\quad} = \underline{\quad}$