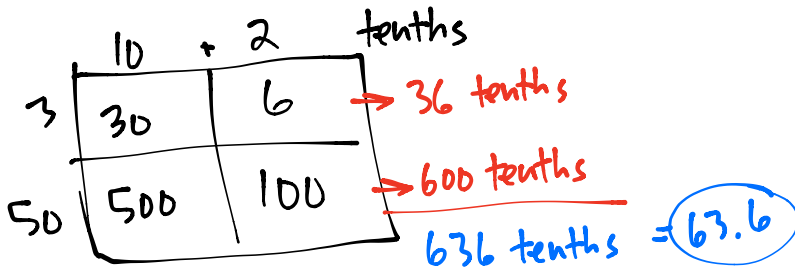


Name _____

Date _____

1. Estimate the product. Solve using an area model and the standard algorithm. Remember to express your products in standard form.

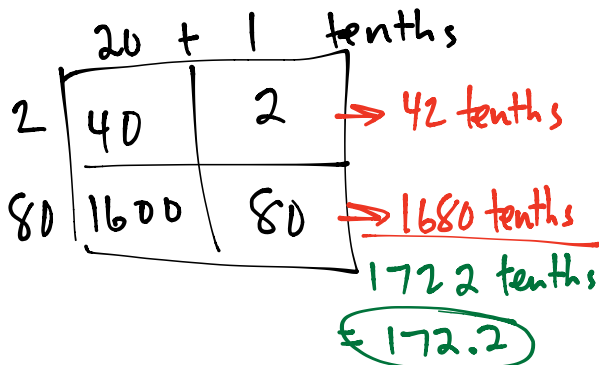
a. $53 \times 1.2 \approx \underline{50} \times \underline{1} = \underline{50}$



12 (tenths)

$$\begin{array}{r} \times 53 \\ + 36 \\ \hline 636 \end{array} \text{ tenths} = \textcircled{63.6}$$

b. $2.1 \times 82 \approx \underline{2} \times \underline{80} = \underline{160}$



21 (tenths)

$$\begin{array}{r} \times 82 \\ + 42 \\ \hline 1680 \end{array} \text{ tenths} = \textcircled{172.2}$$

2. Estimate, and then use the standard algorithm to solve. Express your products in standard form.

a. $4.2 \times 34 \approx \underline{4} \times \underline{30} = \underline{120}$

42 (tenths)

$$\begin{array}{r} \times 34 \\ + 168 \\ \hline 1428 \end{array} \text{ tenths} = \textcircled{142.8}$$

b. $65 \times 5.8 \approx \underline{70} \times \underline{6} = \underline{420}$

58 (tenths)

$$\begin{array}{r} \times 65 \\ + 290 \\ \hline 3770 \end{array} \text{ tenths} = \textcircled{377}$$

c. 3.3×16

$$\begin{array}{r} 3.3 \xrightarrow{\times 10} 33 \\ \times 16 \\ \hline 198 \\ 330 \\ \hline 528 \xrightarrow{\div 10} 52.8 \end{array}$$

d. 15.6×17

$$\begin{array}{r} 15.6 \xrightarrow{\times 10} 156 \\ \times 17 \\ \hline 1092 \\ + 1560 \\ \hline 2652 \xrightarrow{\div 10} 265.2 \end{array}$$

e. 73×2.4

$$\begin{array}{r} 73 \\ \times 2.4 \xrightarrow{\times 10} \times 24 \\ \hline 292 \\ 1460 \\ \hline 1752 \xrightarrow{\div 10} 175.2 \end{array}$$

f. 193.5×57

$$\begin{array}{r} 193.5 \xrightarrow{\times 10} 1935 \\ \times 57 \\ \hline 13545 \\ + 96750 \\ \hline 110295 \xrightarrow{\div 10} 11029.5 \end{array}$$

3. Mr. Jansen is building an ice rink in his backyard that will measure 8.4 meters by 22 meters. What is the area of the rink?

$$\begin{array}{r} 8.4 \xrightarrow{\times 10} 84 \\ \times 22 \\ \hline 168 \\ 1680 \\ \hline 1848 \xrightarrow{\div 10} 184.8 \end{array}$$

184.8 sq. m.

4. Rachel runs 3.2 miles each week day and 1.5 miles each day of the weekend. How many miles will she have run in 6 weeks?

$$\begin{array}{r} 3.2 \xrightarrow{\times 10} 32 \\ \times 30 \\ \hline 960 \xrightarrow{\div 10} 96 \end{array}$$

$$\begin{array}{r} 1.5 \xrightarrow{\times 10} 15 \\ \times 12 \\ \hline 30 \\ + 150 \\ \hline 180 \xrightarrow{\div 10} 18 \end{array}$$

$$96 + 18 = 114 \text{ miles}$$