

Name _____

Date _____

1. Estimate, and then solve using the standard algorithm. You may draw an area model if it helps you.

a. $24 \times 2.31 \approx \underline{20} \times \underline{2} = \underline{40}$

$$\begin{array}{r} 2.31 \\ \times 24 \\ \hline 924 \\ + 4620 \\ \hline 55.44 \end{array}$$

b. $5.42 \times 305 \approx \underline{5} \times \underline{300} = \underline{1500}$

$$\begin{array}{r} 5.42 \\ \times 305 \\ \hline 2710 \\ + 162600 \\ \hline 1653.10 \end{array}$$

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

a. 1.23×21
 $\approx 1 \times 21 = 21$

$$\begin{array}{r} 1.23 \\ \times 21 \\ \hline 123 \\ + 2460 \\ \hline 25.83 \end{array}$$

b. 3.2×41
 $\approx 3 \times 40 = 120$

$$\begin{array}{r} 3.2 \\ \times 41 \\ \hline 32 \\ + 1280 \\ \hline 131.2 \end{array}$$

c. 0.32×41
 $\approx \frac{1}{2} \times 40 = 20$

$$\begin{array}{r} 0.32 \\ \times 41 \\ \hline 32 \\ + 1280 \\ \hline 13.12 \end{array}$$

d. 0.54×62
 $\approx \frac{1}{2} \times 62 = 31$

$$\begin{array}{r} 0.54 \\ \times 62 \\ \hline 108 \\ + 3240 \\ \hline 33.48 \end{array}$$

e. 6.09×28
 $\approx 6 \times 30 = 180$

$$\begin{array}{r} 6.09 \\ \times 28 \\ \hline 4872 \\ 12180 \\ \hline 170.52 \end{array}$$

f. 6.83×683
 $\approx 7 \times 700 = 4900$

$$\begin{array}{r} 6.83 \\ \times 683 \\ \hline 2049 \\ 54640 \\ + 409800 \\ \hline 4664.89 \end{array}$$

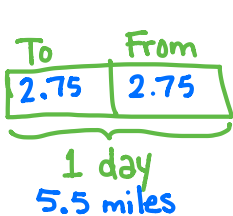
g. 6.09×208
 $\approx 6 \times 200 = 1200$
 $= 1266$

$$\begin{array}{r} 6.09 \\ \times 208 \\ \hline 4872 \\ + 121800 \\ \hline 1266.72 \end{array}$$

h. 171.76×555
 $\approx 200 \times 600 = 120000$

$$\begin{array}{r} 171.76 \\ \times 555 \\ \hline 85880 \\ + 858800 \\ + 8588000 \\ \hline 95326.80 \end{array}$$

3. Eric walks 2.75 miles to and from work every day for an entire year. How many miles did he walk?



$$\begin{array}{r} 365 \\ \times 5.5 \\ \hline 1825 \\ + 18250 \\ \hline 2007.5 \end{array}$$

Eric walked 2007.5 miles during the year.

NOTE: It is likely students may interpret the problem as Eric walking only 2.75 mi per day. This is understandable! Roll with it.

4. Art galleries often price paintings by the square inch. If a painting measures 22.5 inches by 34 inches and costs \$4.15 per square inch, what is the selling price for the painting?

$$\begin{array}{r} 22.5 \\ \times 34 \\ \hline 900 \\ 6750 \\ \hline 765.0 \end{array}$$

$$\begin{array}{r} 4.15 \\ \times 765 \\ \hline 2075 \\ + 24900 \\ + 290500 \\ \hline 3174.75 \end{array}$$

\$3174.75

5. Gerry spends \$1.25 each day on lunch at school. On Fridays she buys an extra snack for \$0.55. How much money will she spend in two weeks?

$$\begin{array}{r} 1.25 \\ + .55 \\ \hline 1.80 \end{array}$$

$$\begin{array}{r} 1.25 \\ \times 8 \\ \hline 10.00 \end{array}$$

$$\begin{array}{r} 1.80 \\ \times 2 \\ \hline 3.60 \end{array}$$

$$\begin{array}{r} 10.00 \\ + 3.60 \\ \hline 13.60 \end{array}$$

\$13.60