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. $2.42 \times 12 \approx 2 \times 12 = 24$

Think: 242 (2.42 × 100)

2.42

× 12

484

2420

2904

b. $4.13 \times 37 \approx 4 \times 40 = 160$

Think 413 (4.13 × 100)

4.13

× 37

2891

12390

15281

Think! 2904 is 100 times too large! What is the real product?

$2.42 \times 12 = 2.904$

Now we have to divide by 100

$4.13 \times 37 = 152.81$

2. Solve using the standard algorithm.

a. $2.03 \times 13 = 26.39$

2.03

× 13

609

2030

26.39

b. 53.16×34

53.16

× 34

21264

+15948

1807.44

c. 371.23×53

371.23

× 53

11169

+18561 50

19675.19

d. 1.57×432

1.57

× 432

314

+6280 0

678.24

3. Use the whole number product and place value reasoning to place the decimal point in the second product. Explain how you know.

   a. If 36 × 134 = 4,824 then 36 × 1.34 = 48.24

   b. If 84 × 2,674 = 224,616 then 84 × 26.74 = 2246.16

   c. 19 × 3,211 = 61,009 then 321.1 × 19 = 6100.9

4. A slice of pizza costs $1.57. How much does 27 slices cost?

$$\begin{array}{r} 1.57 \\ \times \quad 27 \\ \hline 1099 \\ 3140 \\ \hline 42.39 \end{array}$$

$42.39

5. A spool of ribbon holds 6.75 meters. If the craft club buys 21 spools:

   a. What is the total cost if the ribbon sells for $2 per meter?

6.75 × 21 × 2

6.75 × 42

$$\begin{array}{r} 6.75 \\ \times \quad 42 \\ \hline 135 \\ 2700 \\ \hline 283.50 \end{array}$$

$283.50

   b. If the club uses 76.54 meters to complete a project, how much ribbon will be left?

$$\begin{array}{r} 6.75 \\ \times \quad 21 \\ \hline 675 \\ 1350 \\ \hline 141.75 \end{array}$$

$$\begin{array}{r} {}^{3}\,{}^{1}\,{}^{1}\,{}^{1}.75 \\ -\quad 76.54 \\ \hline 65.21 \end{array}$$

65.21 yards