Warm-Up

One friend bought a package of bobbers on sale. He also bought some SPF15 sunscreen $7.53 and a floatation vest for $44.96. Sales tax was $3.74, how much did he spend in total?

$$\begin{array}{r} {}^{3}0.8{}^{2}7 \\ 7.53 \\ 44.96 \\ +\ 3.74 \\ \hline \$\ 57.10 \end{array}$$

4.4 Multiplying Decimals

Step 1 Multiply them as if whole #'s (don't line up the decimals)

Step 2 Count total # of decimal places (right)

Step 3 Multiply like normal then put decimal back in, # of spaces from right

Ex 1 Multiplying Decimal Numbers

a) 8.34 times 4.2

$$\begin{array}{r} 8.34 \\ \times\ 4.2 \\ \hline 1668 \\ +33360 \\ \hline 35.028 \end{array}$$

2 spot
1 spot
3

35.028

b) 45.2

$$\begin{array}{r} \times\ 0.25 \\ \hline 2260 \\ +\ 9040 \\ \hline 11.300 \end{array}$$

total decimals spots 3

11.300

Ex 2 Multiply Write Zeros as Placeholder in Product

a) 0.042 by 0.03

3 2

5 decimals

0.042
× 0.03
0.00126
0.00126

b) $(0.003)^2$

0.003 x 0.003

6 decimals

3
x 3
0.000009
0.000009

Ex 3 Estimating Before Multiplying Decimal Numbers

a) (76.34)(12.5)

3 decimals

Est [front end rounding]

80
x 10
800

Ex

12
7634
x 125
38170
152680
+ 763400
954250.

954.250

b) 58.6 x 17.4

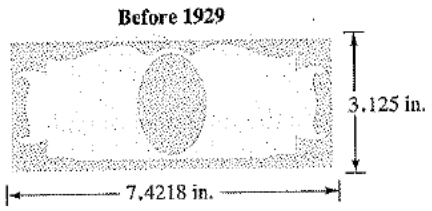
Est

60
x 20
1200

Ex

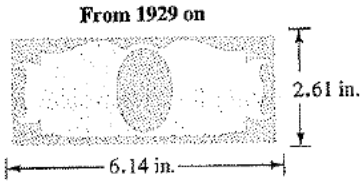
58.6
17.4
2344
41020
58600
1029.64

Exit Card-



(a) Find the area of each $20 bill, rounded to the nearest tenth.

(b) What is the difference in the rounded areas?



48. (a) Find the perimeter of each $20 bill, to the nearest hundredth.

(b) How much less is the perimeter of today's bills than the bills printed before 1929?