Name _____ Date _____

1. Multiply using fraction form and unit form. Check your answer by counting the decimal places. The first one is done for you.

a. $3.3 \times 1.6 = \frac{33}{10} \times \frac{16}{10}$

$= \frac{33 \times 16}{100}$

$= \frac{528}{100}$

$= 5.28$

3 3 tenths
× 1 6 tenths
1 9 8
+ 3 3 0
5 2 8 hundredths

b. $3.3 \times 0.8 =$

$= \frac{33}{10} \times \frac{8}{10}$

$= \frac{264}{100}$

$= 2.64$

2
3 3 tenths
× 8 tenths
26 4 hundredths
2.64

c. $4.4 \times 3.2 =$

$= \frac{44}{10} \times \frac{32}{10}$

$= \frac{44 \times 32}{100}$

$= \frac{1408}{100}$

$= 14.08$

1 44 tenths
× 32 tenths
88
1320
1408 hundredths
14.08

d. $2.2 \times 1.6 =$

$= \frac{22}{10} \times \frac{16}{10}$

$= \frac{22 \times 16}{100}$

$= \frac{352}{100}$

$= 3.52$

1
22 tenths
× 16 tenths
132
220
352 hundredths
3.52

2. Multiply. The first one is partially done for you.

a. $3.36 \times 1.4 = \frac{336}{100} \times \frac{14}{10}$

$= \frac{336 \times 14}{1{,}000}$

$= \frac{4{,}704}{1{,}000}$

$= 4.704$

3 3 6 hundredths
× 1 4 tenths
1344
+ 3360
4704 thousandths
4.704

b. $3.35 \times 0.7 =$

$= \frac{335}{100} \times \frac{7}{10}$

$= \frac{335 \times 7}{1000}$

$= \frac{2345}{1000}$

$= 2.345$

3 3 5 hundredths
× 7 tenths
2345 thousandths
2.345

c. $4.04 \times 3.2 =$

$= \frac{404}{100} \times \frac{32}{10}$

$= \frac{404 \times 32}{1000}$

$= \frac{12928}{1000}$

$= 12.928$

404 hundredths
× 32 tenths
808
12120
12928 thousandths
12.928

d. $4.4 \times 0.16 =$

$= \frac{44}{10} \times \frac{16}{100}$

$= \frac{44 \times 16}{1000}$

$= \frac{704}{1000}$

$= 0.704$

44 tenths
× 16 hundredths
264
440
704 thousandths
0.704

3. Solve using the standard algorithm. Show your thinking about the units of your product. The first one is done for you.

a. $3.2 \times 0.6 = 1.92$

$\frac{32}{10} \times \frac{6}{10} = \frac{32 \times 6}{100}$

3 2 tenths
× 6 tenths
1 9 2 hundredths

1.92

b. $2.3 \times 2.1 = 4.83$

$\frac{23}{10} \times \frac{21}{10} = \frac{23 \times 21}{100}$

2 3 tenths
× 2 1 tenths
2 3
+ 4 6 0
4 8 3 hundredths

4.83

c. $7.41 \times 3.4 = 25.194$

741 hundredths
× 34 tenths
2964
22230
25194 thousandths
25.194

$\frac{741}{100} \times \frac{34}{10} = \frac{741 \times 34}{1000}$

d. $6.50 \times 4.5 = 29.25$

$\frac{650}{100} \times \frac{45}{10} = \frac{650 \times 45}{1000}$

650 hundredths
× 45 tenths
3250
+ 26000
29250 thousandths
29.250

4. Erik buys 2.5 pounds of cashews. If each pound of cashews costs $7.70, how much will he pay for the cashews?

7.70 → 770 hundredths
× 2.5 → × 25 tenths
3850
+ 15400
19250 thousandths
19.25

$19.25

5. A swimming pool at a park measures 9.75 meters by 7.2 meters.

a. Find the area of the swimming pool.

9.75 → 975 hundredths
× 7.2 → × 72 tenths
1950
+ 68250
70200 thousandths
70.2

The area of the pool is 70.2 sq. m.

b. The area of the playground is one and a half times that of the swimming pool. Find the total area of the swimming pool and the playground.

70.2 → 702 tenths
× 1.5 × 15 tenths
3510
+ 7020
10530 hundredths
105.3

105.3
+ 70.2
175.5

The total area is 175.5 m^2.