

0.3b Homework: Multiplying Multi-Digit Decimals

Directions: Solve each problem below; be sure to estimate your answer first. (Hint: If desired and appropriate change your decimals to fractions in order to evaluate.)

1. 423.56×63.72	2. Sienna spends \$27.50 on coffee and a Danish for breakfast each week for an entire semester. How much money does she spend on breakfast for the semester if there are 16.25 weeks in a semester?
3. Flora is designing a triangular structural beam. The base of the triangular beam measures 14.002 meters and the height is 3.85 meters. Find the area of the triangular beam?	4. 0.000125×0.005
5. $1.037 \times 5 - 0.68$	6. 0.0021×14.2
7. A person's weight on the moon is about 0.167 of their weight on Earth. How much does a 168 pound astronaut weigh on the moon?	8. $5.32(4.2 + 1.85)$

9. Describe each pattern given below, then find the next two terms. 

a. 1, 0.3, 0.09, 0.027 ...

b. 17, 0.17, 0.0017...

c. 10, 15, 22.5, 33.75 ...

10.  Andrei has enough ceramic tiles to cover a rectangular patio area of 60.75 ft^2 . He has made a list of possible dimensions he could use for the rectangular patio. Some of these dimensions are wrong. Circle the dimensions that will **not** work for an area of 60.75 ft^2 . Explain why these dimensions will not work.

- $27 \text{ ft} \times 2.25 \text{ ft}$
- $2.7 \text{ ft} \times 22.5 \text{ ft}$
- $0.27 \text{ ft} \times 22.5 \text{ ft}$
- $27 \text{ ft} \times 22.5 \text{ ft}$

- $27 \text{ ft} \times 22.50 \text{ ft}$
- $0.27 \text{ ft} \times 225 \text{ ft}$
- $270 \text{ ft} \times 0.225 \text{ ft}$

11. You and two friends are going out for lunch at a restaurant. The menu for the restaurant is shown. Use the menu to choose lunch items for you and your friends then complete the following.

- a. Write the item and its price on the check provided.
- b. Find the subtotal for your total bill.
- c. Multiply the subtotal by 0.07 to find the sales tax and then find the total bill with tax.
- d. Find 20% of the total bill to determine how much money you should leave as a tip.

Lunch Menu	
<i>Sandwiches</i>	
Turkey or Ham.....	\$5.40
Tuna.....	\$4.75
Chicken.....	\$6.20
<i>Pizza by the slice</i>	
Pepperoni.....	\$3.75
Hawaiian.....	\$4.30
Cheese.....	\$3.50
<i>Salads</i>	
Caesar.....	\$8.30
BBQ Chicken.....	\$9.45
Spinach Strawberry...	\$7.60
<i>Drinks</i>	
Soda.....	\$1.75
Lemonade.....	\$2.05
Bottled Water.....	\$1.60

GUEST CHECK		
Date	Invoice # 568345	
Subtotal:		
Tax:		
Tip:	Total:	