Lesson 11 Problem Set

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. $1.38 \times 32 \approx \underline{1} \underline{0} \underline{0} \times \underline{3} \underline{2} = \underline{1} \underline{0} \underline{0}$

      Think! $1.38 \times 100 = 138$

      $$1.38 \times 32 = \underline{1} \underline{3} \underline{8} \times \underline{3} \underline{2}$$

   b. $3.55 \times 89 \approx \underline{4} \underline{4} \underline{1} \underline{6} \times \underline{8} \underline{9} = \underline{4} \underline{4} \underline{1} \underline{6}$

      Think! 4,416 is 100 times too large! What is the real product?

      $4,416 \div 100 = 44.16$

      $$3.55 \times 89 = \underline{3} \underline{.} \underline{5} \underline{5} \times \underline{8} \underline{9}$$
2. Solve using the standard algorithm.
   a. $5.04 \times 8$
   b. $147.83 \times 67$
   c. $83.41 \times 504$
   d. $0.56 \times 432$

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 $98 \times 768 = 75,264$ then $98 \times 7.68 = \underline{\phantom{0000}}$
   b. If $73 \times 1,563 = 114,099$ then $73 \times 15.63 = \underline{\phantom{0000}}$
   c. If $46 \times 1,239 = 56,994$ then $46 \times 123.9 = \underline{\phantom{0000}}$
4. Jenny buys 22 pens that cost $1.15 each and 15 markers that cost $2.05 each. How much did Jenny spend?

5. A living room measures 24 feet by 15 feet. An adjacent square dining room measures 13 feet on each side. If carpet costs $6.98 per square foot, what is the total cost of putting carpet in both rooms?