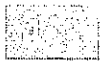
Mid-Module 3 Study Guide

Mid-Module Review 

Name _____ Date _____

1. Draw an area model to solve the following. Find the value of the following expressions.

   a. 40×30

   b. 4×284

2. Use any place value strategy to multiply.

   a. 4×57

   b. 5×428

   c. $6 \times 1{,}706$

   d. $7{,}016 \times 7$

Solve using a model or equation. Show your work and write your answer as a statement.

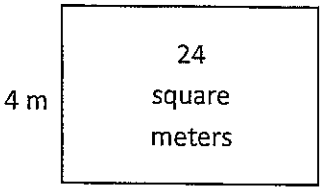
3. A ballet studio has two rooms. Room A has 7 rows of seats with 13 seats in each row. Room B has four times as many seats as Room A. How many seats are there in both rooms?

4. The discount store has 6 cases of pencils with 48 boxes in each case on display. In storage, the discount store has 8 cases of pencils with 104 boxes in each case. How many total boxes of pencils does the discount store have? Is your answer reasonable? Explain.

5. Last year, Mr. Quaker's rectangular workshop had a width of 4 meters and an area of 24 square meters. This year, he wants to make his workshop three times as long and two times as wide.

   a. Solve for the length of last year's workshop using the area formula. Then, draw and label the measurements of this year's workshop.

Last Year



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This Year

   b. How much area will Mr. Quaker have in the new workshop?

c. Last year, Mr. Quaker had partition walls all the way around his workshop. He can reuse all of the walls he had around the workshop last year, but he needs to buy more partition walls to go around this year's workshop. How many more meters of partition walls are needed for this year's workshop than last year's?

d. Last year, Mr. Quaker was able to store 3 rows of wood blocks with 12 blocks in each row. This year, he plans to store twice as many rows with twice as many blocks in each. How many wood blocks will he store this year? Write a multiplication equation to solve. Assess the reasonableness of your answer.