

4.NBT.5 Multiply 2- digit by 2-digit area models

I can multiply multi-digit numbers using various strategies:
area models & partial products

LINGO

distributive property

To give a share or part of something.

$$\begin{array}{c} 50 \times 5 \\ \swarrow \quad \searrow \\ 10 \times 5 \quad \times 5 \end{array}$$



area model

Figure used to represent area.

Example:



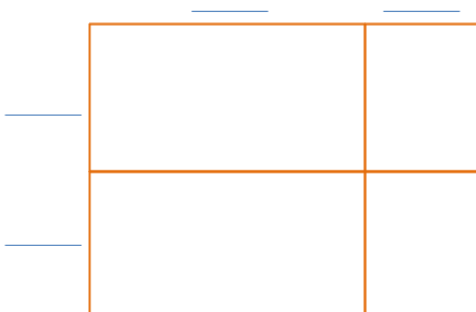
HOW

	20	7
40	$40 \times 20 = 800$	$4 \times 7 = 28$
9	$9 \times 20 = 180$	$9 \times 7 = 63$

$$\begin{array}{r} 800 \\ 28 \\ 180 \\ + 63 \\ \hline 1071 \end{array}$$

PRACTICE

$$12 \times 45$$

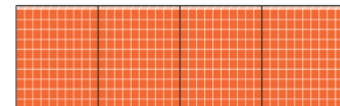


1. Break apart numbers into expanded form.
2. Multiply the side number(s) by the top number(s).
3. Add the products together.

+ _____

$$12 \times 45$$

This model represents
 $10 \times 40 = 400$



400

This model represents
 $2 \times 40 = 80$



80

This model represents
 $10 \times 5 = 50$



50

This model represents
 $2 \times 5 = 10$



+ 10

540

Pssst! You've got this.

