LESSON MAKER PRO

Decimal Model Match

Use models to find decimal products.

GRADE 5 · TEKS 5.3.D

5.3.D "represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models;"

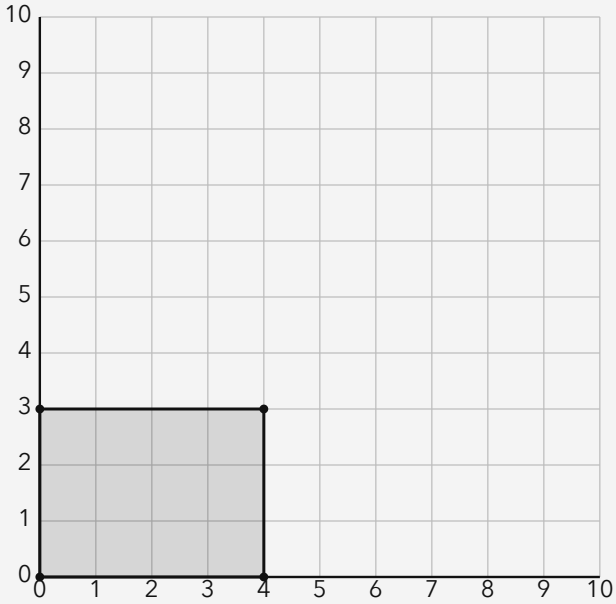
NAME _____ DATE _____

HUNDREDTHS IN A PRODUCT

A 10 by 10 model has 100 small squares, so each small square is one hundredth. Multiply the digits, then use the model or place value to name the product in hundredths.

WORKED EXAMPLE

One full 10-by-10 grid is 1 whole; each cell is 0.01. Scale numbers count cells. The shaded rectangle has 3 rows and 4 columns: its sides are 0.3 and 0.4 of the whole side. Find 0.3 × 0.4.



1. Three rows of four hundredths form a rectangle with side lengths 0.3 and 0.4.
2. Count 12 shaded hundredths.
3. Write 0.12.

Answer: 0.12

PRACTICE 4 problems

1 Find: 0.7 x 0.5

ANSWER _____

2 Find: 0.9 x 0.2

ANSWER _____

3 Find: 0.4 x 0.6

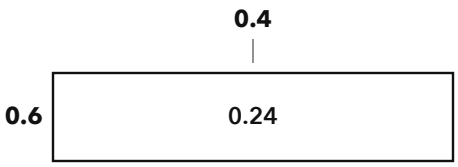
ANSWER _____

4 Complete: 0.25 x 0.4 = ___

ANSWER _____

APPLY IT Show your work

1 A club sells 0.6 kg of trail mix for $0.40 per kg. Use the area model. What is the cost?



ANSWER _____

2 A game download is 0.75 GB. Maya downloads 0.8 of it before bed. How many GB does she download?

WORK SPACE

ANSWER _____

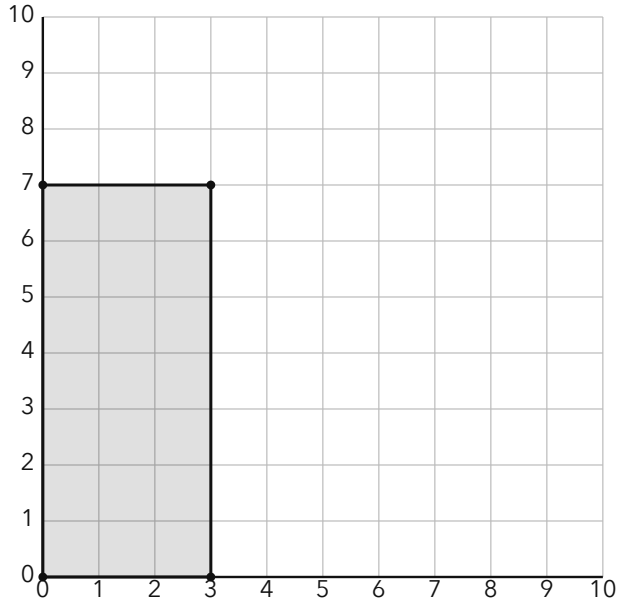
3 Use a teacher-supplied 10-by-10 paper grid. One full grid is 1 whole, each cell 0.01. Mark a 3-row by 4-column rectangle. Cut or use precut cells and arrange those 12 cells in the same rectangle. On separate paper draw the whole grid and your rectangle, label sides 0.3 and 0.4, and explain 0.3 × 0.4 = 0.12 from the objects and drawing. Ask an adult for cutting help.

WORK SPACE

ANSWER _____

CHALLENGE One step up

One full 10-by-10 grid is 1 whole; scale numbers count cells. The shaded rectangle has 7 rows and 3 columns: 0.7 × 0.3. Is the product 0.21 or 2.1? Explain using hundredths.



WORK SPACE AND ANSWER

ANSWER KEY

Decimal Model Match

GRADE 5 · TEKS 5.3.D

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find: 0.7 x 0.5	**0.35**
2	Find: 0.9 x 0.2	**0.18**
3	Find: 0.4 x 0.6	**0.24**
4	Complete: 0.25 x 0.4 = ___	**0.10**

PART 2 · APPLY IT

1. **$0.24** Multiply 0.6 by 0.40. The model shows 24 hundredths, or $0.24.
2. **0.60 GB** Multiply 0.75 by 0.8 to get 0.60.
3. **A 3-by-4 rectangle contains 12 hundredths, so 0.3 × 0.4 = 0.12.** Observe actual paper-cell arrangement and a corresponding drawing tied to a unit whole. Check side lengths, twelve equal hundredth cells and the product explanation; numerical multiplication alone does not complete this task.

CHALLENGE

0.21, because 21 shaded squares are 21 hundredths.

Accept equivalent decimal forms, such as 0.1 for 0.10 and 0.6 for 0.60. For the challenge, accept an explanation that identifies 21 hundredths.