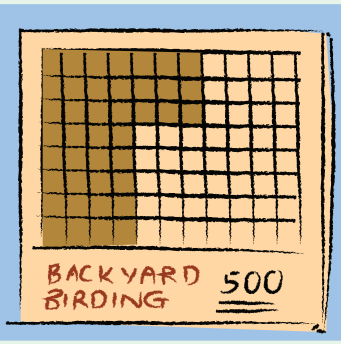
Unit 4
Lesson
12

Name _____ Date _____

TEKS 5.1.A, 5.1.B, 5.1.E, 5.3.D, 5.3.E

Model Multiplication

Let's represent multiplication of decimals with pictorial models.



Warm-Up eyes on teacher

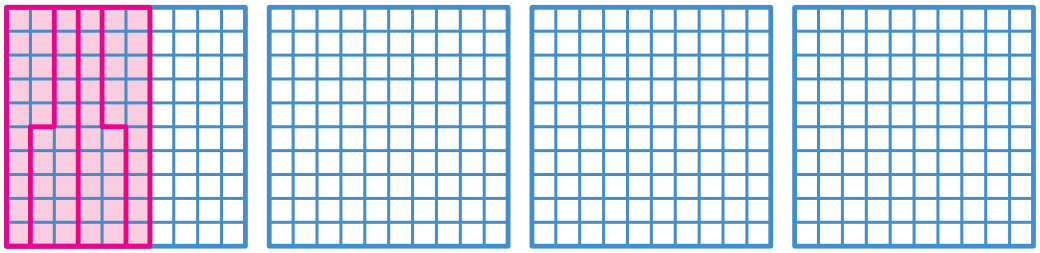
We are a math community. What strengths can you bring to class today to help our math community grow?

Activity
1

On the Model

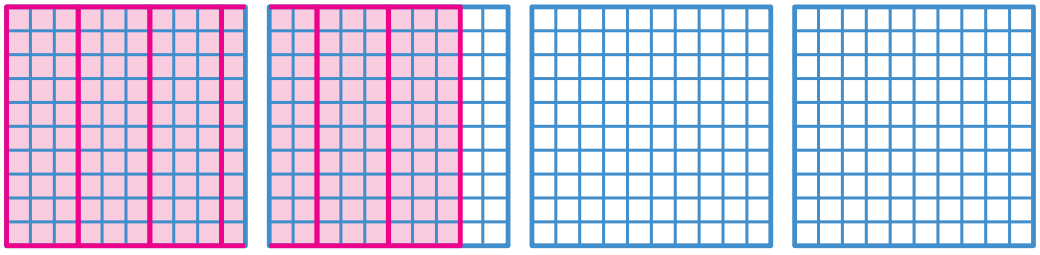
Represent the expression by shading the hundredths model and circling each group of decimal factors. Then determine the product. Each model represents 1 whole. Sample work shown.

1 4×0.15



0.6

2 6×0.3

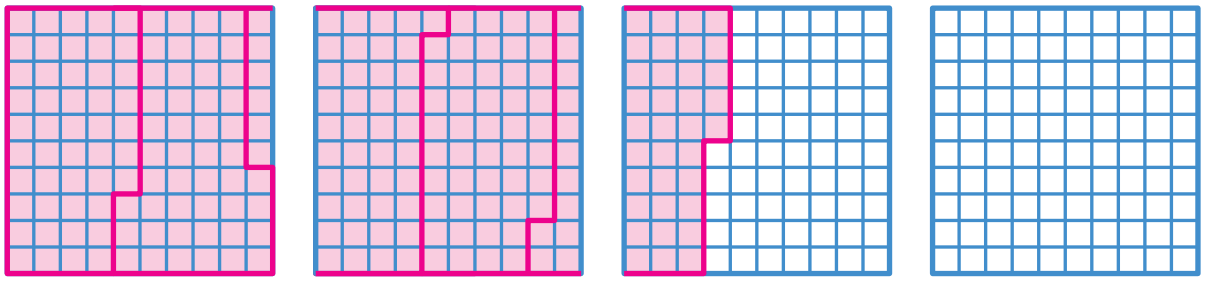


1.80

Name _____ Date _____

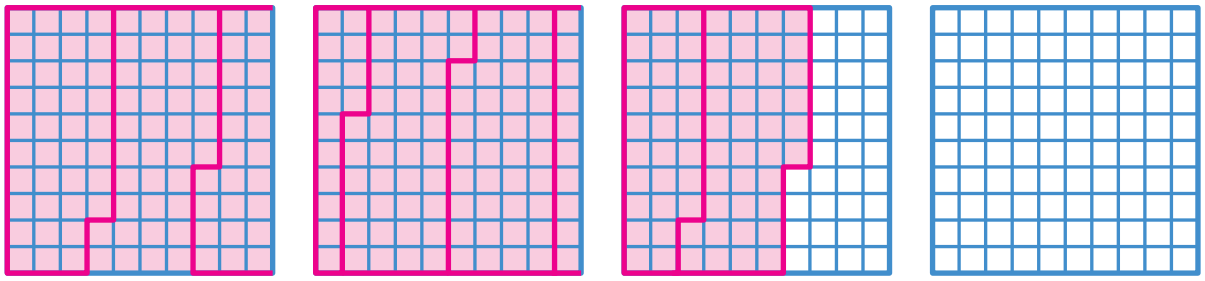
On the Model (continued)

3 5×0.47



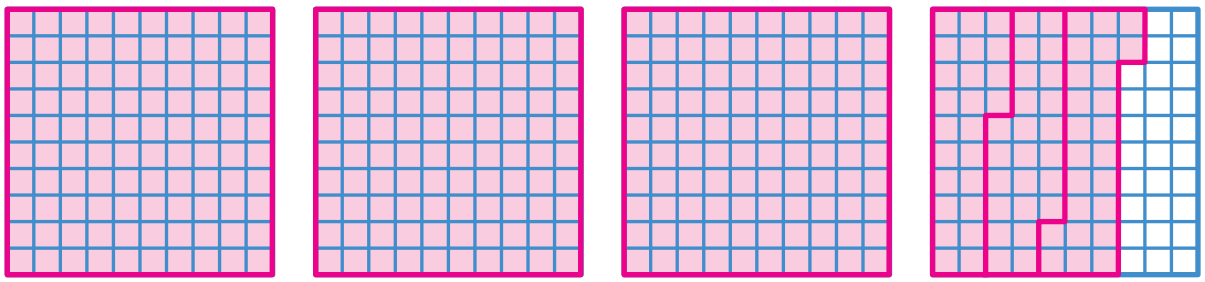
2.35

4 Miguel bought 7 price tags for his scarves. Each price tag cost $0.38. How much money did he spend on the price tags?



$2.66

5 Jonathan bought 3 puzzle boxes for his puzzles. Each box cost $1.24. What is the total cost of the puzzle boxes?

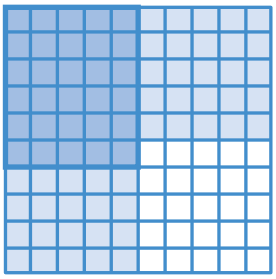


$3.72

Name _____ Date _____

Finding Factors, Finding Products

Fiona used the hundredths model to show 0.5 × 0.60. She thought of the expression as 0.5 *of* 0.60. Use Fiona's work to determine the product.



6 0.5 × 0.60

0.30

7 **Discuss**

How did you determine the product? Where do you see each factor on the hundredths model?

Oral activity: No writing expected. Sample response shown.

I determined the product by looking at the darkest part of the model, where the factors overlap. Fiona also outlined the darker part. I see 0.6 going up on the left and 0.50 going across the top.

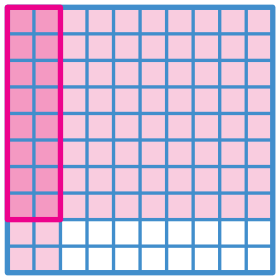
Name _____ Date _____

Finding Factors, Finding Products (continued)

Shade each factor to determine the product. Each model represents 1 whole. Sample work shown.

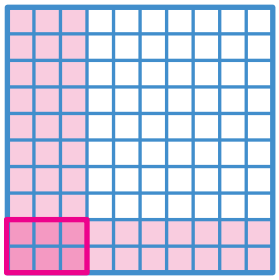
Show your thinking.

8 0.8 × 0.2



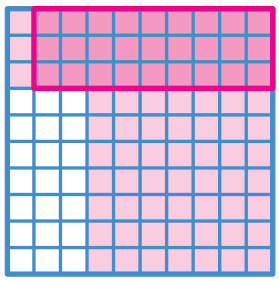
answer: 0.16

9 0.20 × 0.3



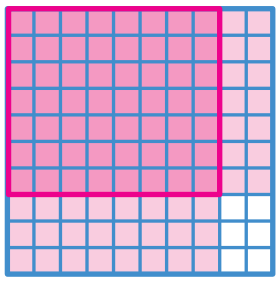
answer: 0.06

10 0.3 × 0.9



answer: 0.27

11 0.7 × 0.80



answer: 0.56