LESSON MAKER PRO

Decimal Game Plan

Multiply and divide decimals in real situations.

GRADE 5 · 5.NOS.B.7

5.NOS.B.7 "Apply and extend previous understanding of multiplication and division of whole numbers to multiply and divide decimals to hundredths in context. Apply estimation strategies to estimate products and quotients. Use concrete models..."

NAME _____ DATE _____

BREAK IT APART

Split decimal factors by place value, then add the partial products. For division, use multiplication to check that the quotient makes sense.

WORKED EXAMPLE

Use the area model to find the product of its side lengths.

	3	0.4
1	3	0.4
0.2	0.6	0.08

1. 1 × 3 = 3, and 1 × 0.4 = 0.4.
2. 0.2 × 3 = 0.6, and 0.2 × 0.4 = 0.08.
3. 3 + 0.4 + 0.6 + 0.08 = 4.08.

Answer: 4.08

PRACTICE 4 problems

1 Find 0.6 × 0.7.

ANSWER _____

2 Find 5.4 × 0.3.

ANSWER _____

3 Find 6.72 / 4.

ANSWER _____

4 Estimate 4.5 / 0.9, then find the exact quotient.

ANSWER _____

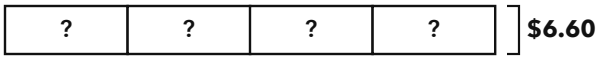
APPLY IT Show your work

1 The side lengths of a rectangular game board are shown in feet. What is its area?

	1	0.6
2	2	1.2
0.5	0.5	0.3

ANSWER _____

2 Four friends split the cost of a game download equally. How much does each pay? Write a division equation.



ANSWER _____

CHALLENGE One step up

A club has $12.60 to spend on beads that cost $0.35 each. How many beads can it buy? Check with multiplication.

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Game Plan

GRADE 5 · 5.NOS.B.7

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 0.6 × 0.7.	**0.42**
2	Find 5.4 × 0.3.	**1.62**
3	Find 6.72 / 4.	**1.68**
4	Estimate 4.5 / 0.9, then find the exact quotient.	**Estimate: about 5. Exact quotient: 5.**

PART 2 · APPLY IT

1. **4 square feet** Add the partial areas: 2 + 1.2 + 0.5 + 0.3 = 4 square feet.
2. **$1.65 each; $6.60 / 4 = $1.65** Divide the total cost into four equal parts. Each part is $1.65.

CHALLENGE

36 beads; 36 × $0.35 = $12.60.

Accept any reasonable estimate near 5 for the fourth practice problem. For the challenge, accept an equivalent multiplication check.