LESSON MAKER PRO

Decimal Operation Quest

Use standard algorithms to calculate with decimals.

GRADE 6 · 6.NS.B.3

CCSS.Math.Content.6.NS.B.3 "Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation."

NAME _____ DATE _____

LINE UP AND COUNT

For addition and subtraction, line up decimal points and add zeros when needed. For multiplication, multiply as whole numbers, then count decimal places. For division, move each decimal point the same number of places until the divisor is a whole number.

WORKED EXAMPLE

47.306 + 8.79

1. Write 8.79 as 8.790 so both numbers have three decimal places.
2. Line up the decimal points and add from right to left.
3. 47.306 + 8.790 = 56.096.

Answer: 56.096

PRACTICE 6 problems

1 18.47 + 6.859

ANSWER _____

2 63.2 - 17.685

ANSWER _____

3 4.36 x 2.7

ANSWER _____

4 15.84 / 1.2

ANSWER _____

5 7.205 x 3.4

ANSWER _____

6 92.736 / 2.4

ANSWER _____

APPLY IT Show your work

1 The gaming club has $125.60 to buy controllers. Each controller costs $13.45, and the club buys 8 controllers. How much money is left?

WORK SPACE

ANSWER _____

2 A skater travels 18.9 miles in 1.5 hours at a constant speed. What is the skater's speed in miles per hour?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Calculate (14.75 x 3.6) - 8.29. Show your standard-algorithm work.

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Operation Quest

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	18.47 + 6.859	**25.329**
2	63.2 - 17.685	**45.515**
3	4.36 x 2.7	**11.772**
4	15.84 / 1.2	**13.2**
5	7.205 x 3.4	**24.497**
6	92.736 / 2.4	**38.64**

PART 2 · APPLY IT

1. **$18.00** Multiply $13.45 by 8 to find the total cost, $107.60. Subtract $107.60 from $125.60.
2. **12.6 miles per hour** Divide 18.9 by 1.5 to find the number of miles traveled each hour.

CHALLENGE

44.81

Accept equivalent decimal forms, such as 13.20 for 13.2 and 24.4970 for 24.497. Students should use correctly aligned decimal points for addition and subtraction and correctly place decimal points in multiplication and division.