LESSON MAKER PRO

Decimal Power Moves

Use standard algorithms to compute with decimals.

GRADE 6 · NY-6.NS.3

NY-6.NS.3 "Fluently add, subtract, multiply, and divide multi-digit decimals using a standard algorithm for each operation."

NAME _____ DATE _____

LINE UP AND COMPUTE

Line up decimal points when you add or subtract. When you multiply, multiply as whole numbers first, then place the decimal using the total number of decimal digits. When you divide by a decimal, move the decimal point the same number of places in both numbers until the divisor is a whole number.

WORKED EXAMPLE

Find 23.47 - 8.596.

1. Write a zero so both numbers have three decimal places: 23.470 - 8.596.
2. 23.470 - 8.596 --------
3. Subtract from right to left, regrouping when needed.
4. 23.470 - 8.596 -------- 14.874

Answer: 14.874

PRACTICE 6 problems

1 Find 46.308 + 7.95.

ANSWER _____

2 Find 90.4 - 36.78.

ANSWER _____

3 Find 6.25 × 3.4.

ANSWER _____

4 Find 14.07 × 0.6.

ANSWER _____

5 Find 57.24 ÷ 12.

ANSWER _____

6 Find 8.316 ÷ 2.4.

ANSWER _____

APPLY IT Show your work

1 A student has $75.50 saved for a new game. They spend $38.04 on a game controller. How much money is left?

WORK SPACE

ANSWER _____

2 A robotics team tests a robot on a 187.2-meter course. The robot travels the course in 48 equal sections. How many meters are in each section?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Find 42.6 ÷ 0.15. Show how you change the divisor to a whole number before dividing.

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Power Moves

GRADE 6 · NY-6.NS.3

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 46.308 + 7.95.	**54.258**
2	Find 90.4 - 36.78.	**53.62**
3	Find 6.25 × 3.4.	**21.25**
4	Find 14.07 × 0.6.	**8.442**
5	Find 57.24 ÷ 12.	**4.77**
6	Find 8.316 ÷ 2.4.	**3.465**

PART 2 · APPLY IT

1. **$37.46** Subtract the cost from the amount saved: 75.50 - 38.04 = 37.46. The student has $37.46 left.
2. **3.9 meters** Divide the total distance by the number of equal sections: 187.2 ÷ 48 = 3.9. Each section is 3.9 meters long.

CHALLENGE

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Accept equivalent answers with trailing zeros, such as 53.620. For division with a decimal divisor, accept work that shifts both decimal points the same number of places.