LESSON MAKER PRO

Decimal Power Moves

Use place value to add, subtract, multiply, and divide decimals.

GRADE 5 · NY-5.NBT.7

NY-5.NBT.7 "Using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between operations: add and subtract decimals to hundredths; multiply and divide decimals to hundredths..."

NAME _____ DATE _____

PLACE VALUE STEPS

Line up decimal points when you add or subtract. When you multiply, multiply as whole numbers, then count the total decimal digits to place the decimal point. When you divide, multiply both numbers by the same power of 10 until the divisor is a whole number.

WORKED EXAMPLE

Find 3.6 × 1.4.

1. Multiply as whole numbers: 36 × 14 = 504.
2. There is 1 decimal digit in each factor, so there are 2 decimal digits altogether.
3. Place the decimal point two digits from the right: 5.04.

Answer: 5.04

PRACTICE 6 problems

1 Find 7.25 + 4.6.

ANSWER _____

2 Find 15.00 - 8.37.

ANSWER _____

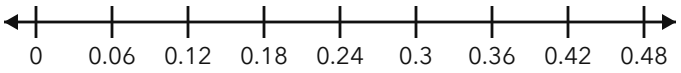
3 Find 2.4 × 0.35.

ANSWER _____

4 Find 8.64 ÷ 1.2.

ANSWER _____

5 Find 0.48 × 0.5 using the blank number line. Mark the halfway point of the interval from 0 to 0.48 and trace the segment from 0 to that point. Label its value. Explain why multiplying by 0.5 gives half of 48 hundredths, then connect your drawing to the written product.



ANSWER _____

_____

6 Find 6.3 ÷ 0.09.

ANSWER _____

APPLY IT Show your work

1 Jada has $18.75 to spend at a school art sale. She buys 3 sketch pads that cost $2.35 each. How much money does she have left?

WORK SPACE

ANSWER _____

2 A bracelet maker has 7.56 meters of cord. She cuts the cord into 4 equal pieces. How many meters of cord are in each piece?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A robotics club has $29.75. It buys 5 sensor covers for $4.36 each, then splits the money left equally among 3 project teams. How much does each team get? Explain your reasoning with equations or words.

WORK SPACE AND ANSWER

ANSWER KEY # Decimal Power Moves

GRADE 5 · NY-5.NBT.7

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 7.25 + 4.6.	**11.85**
2	Find 15.00 - 8.37.	**6.63**
3	Find 2.4 × 0.35.	**0.84**
4	Find 8.64 ÷ 1.2.	**7.2**
5	Find 0.48 × 0.5 using the blank number line. Mark the halfway point of the interval from 0 to 0.48 and trace the segment from 0 to that point. Label its value. Explain why multiplying by 0.5 gives half of 48 hundredths, then connect your drawing to the written product.	**0.24**
6	Find 6.3 ÷ 0.09.	**70**

PART 2 · APPLY IT

1. **$11.70** Multiply 3 × $2.35 to find that the sketch pads cost $7.05. Subtract $7.05 from $18.75.
2. **1.89 meters** Divide 7.56 by 4 to find the length of one equal piece.

CHALLENGE

Each team gets $2.65. Multiply 5 × $4.36 = $21.80, subtract $29.75 - $21.80 = $7.95, then divide $7.95 ÷ 3 = $2.65.

Accept equivalent decimal forms when the value is correct, such as 7.20 for 7.2. For the challenge, accept any clear explanation that shows the multiplication, subtraction, and equal division in a correct order. For Practice 5, check an actual halfway mark at 0.24, the traced 0-to 0.24 segment, and an explanation connecting half of 48 hundredths to 24 hundredths and 0.48 × 0.5 = 0.24. Accept equivalent drawings that correctly represent the same quantity.

Practice 5: halfway point 0.24; half of 48 hundredths is 24 hundredths.

