LESSON MAKER PRO

Decimal Power Moves

Multiply and divide decimals through the thousandths.

GRADE 6 · MA.6.NSO.2.1

MA.6.NSO.2.1 "Multiply and divide positive multi-digit numbers with decimals to the thousandths, including using a standard algorithm with procedural fluency."

NAME _____ DATE _____

DECIMAL STEPS

To multiply decimals, multiply as if the numbers are whole numbers. Then place the decimal point by counting the total decimal places in both factors. To divide by a decimal, move both decimal points the same number of places until the divisor is a whole number.

WORKED EXAMPLE

7.218 x 11

1. Multiply 7218 x 11 = 79398.
2. There are 3 decimal places in 7.218.
3. Place the decimal 3 places from the right: 79.398.

Answer: 79.398

PRACTICE 6 problems

1 6.4 x 2.5

ANSWER _____

2 12.75 / 5

ANSWER _____

3 0.608 x 7

ANSWER _____

4 9.324 / 4

ANSWER _____

5 15.06 x 0.4

ANSWER _____

6 18.9 / 0.06

ANSWER _____

APPLY IT Show your work

1 You buy 8 game tokens that cost $1.25 each. How much do the tokens cost altogether?

WORK SPACE

ANSWER _____

2 A video project uses 6.384 GB of storage for 8 equal-length clips. How much storage does each clip use?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A robotics team has 9.125 meters of wire. Each complete robot needs 0.375 meter of wire. How many complete robots can the team make, and how much wire will remain?

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Power Moves

GRADE 6 · MA.6.NSO.2.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	6.4 x 2.5	**16**
2	12.75 / 5	**2.55**
3	0.608 x 7	**4.256**
4	9.324 / 4	**2.331**
5	15.06 x 0.4	**6.024**
6	18.9 / 0.06	**315**

PART 2 · APPLY IT

1. **$10.00** Multiply 8 by 1.25. The total cost is $10.00.
2. **0.798 GB** Divide 6.384 by 8. Each clip uses 0.798 GB.

CHALLENGE

24 complete robots; 0.125 meter of wire remains.

Accept equivalent decimal forms that have the same value, such as 16.0 for 16. For the challenge, accept 24 robots and 0.125 m remaining.