

Multiply with Place Value

Use place value to multiply whole numbers and decimals.

GRADE 5 • 5.NBT.B

CCSS.Math.Content.5.NBT.B "Perform operations with multi-digit whole numbers and with decimals to hundredths."

NAME _____

DATE _____

MULTIPLY CAREFULLY

When you multiply decimals, first multiply as if the decimal points are not there. Then count the total decimal places in both factors and place the decimal point in the product. Estimate first to check whether your answer makes sense.

WORKED EXAMPLE

$$14.7 \times 2.3$$

1. Multiply without decimals: 147×23 .
2. Compute $147 \times 23 = 3,381$.
3. The factors have 2 decimal places altogether.
4. Place the decimal 2 places from the right: 33.81.

Answer: 33.81

PRACTICE 6 problems

1 326×48

ANSWER _____

2 7.5×3.2

ANSWER _____

3 0.75×0.4

ANSWER _____

4 63.08×5

ANSWER _____

5 $1,204 \times 36$

ANSWER _____

6 12.5×0.8

ANSWER _____

APPLY IT Show your work

- 1** A gaming club earns 27 points for each of 36 completed challenges. How many points does the club earn?

WORK SPACE

ANSWER _____

- 2** Riley rides a scooter 2.35 miles each day for 6 days. How many miles does Riley ride in all?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A team buys 16 water bottles that cost \$1.25 each. The team pays with \$25. How much change should the team receive?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	326×48	15,648
2	7.5×3.2	24
3	0.75×0.4	0.30
4	63.08×5	315.4
5	$1,204 \times 36$	43,344
6	12.5×0.8	10

PART 2 • APPLY IT

1. **972 points** Multiply 27×36 . The club earns 972 points.
2. **14.1 miles** Multiply 2.35×6 . Riley rides 14.1 miles in all.

CHALLENGE

\$5

Accept 24.0 for problem 2, 315.40 for problem 4, 10.0 for problem 6, and 14.10 miles for the second word problem. Students may use a standard algorithm, partial products, or another correct place-value strategy.