

Decimal Power Moves

Choose a strategy and keep place value in view.

GRADE 6 • 6.NR.1.3

6.NR.1.3 "Perform operations with multi-digit decimal numbers fluently using models and student-selected strategies"

NAME _____

DATE _____

KEEP PLACES STRAIGHT

For addition and subtraction, line up decimal points so each digit stays in its place-value column. For multiplication and division, use place value, an area model, or a strategy such as making an equivalent whole-number division, then check whether your answer is reasonable with an estimate.

WORKED EXAMPLE

$$24.68 + 7.9$$

1. Write 7.9 as 7.90 so the decimal points line up.
2. Add the decimal parts: $0.68 + 0.90 = 1.58$.
3. Add the whole-number parts and regroup: $24 + 7 + 1 = 32$.

Answer: 32.58

PRACTICE 6 problems

1 $56.37 + 8.65$

ANSWER _____

2 $90.4 - 27.86$

ANSWER _____

3 6.25×3.4

ANSWER _____

4 $18.72 \div 3.6$

ANSWER _____

5 $104.09 + 16.8$

ANSWER _____

6 $45.6 \div 1.2$

ANSWER _____

APPLY IT Show your work

- 1** An online game add-on costs \$13.75. Sam buys 3 add-ons and pays with \$50.00. How much change does Sam receive?

WORK SPACE

ANSWER _____

- 2** A school podcast has 9.6 minutes of recorded clips. The editor places the clips into equal 0.8-minute segments. How many segments can the editor make?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Solve $(31.68 - 7.68) \div 1.6$. Show a strategy that makes the division easier.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$56.37 + 8.65$	65.02
2	$90.4 - 27.86$	62.54
3	6.25×3.4	21.25
4	$18.72 \div 3.6$	5.2
5	$104.09 + 16.8$	120.89
6	$45.6 \div 1.2$	38

PART 2 • APPLY IT

1. **\$8.75** Multiply 13.75 by 3 to find the total cost, \$41.25. Subtract \$41.25 from \$50.00.
2. **12 segments** Divide 9.6 by 0.8. Multiply both numbers by 10 to make $96 \div 8$, which equals 12.

CHALLENGE

15; $31.68 - 7.68 = 24$, and $24 \div 1.6 = 240 \div 16 = 15$.

Accept accurate student-selected strategies, including place-value models, partial products, and equivalent whole-number division. Accept trailing-zero forms such as 5.20 for 5.2.