

Decimal Detective

Read, compare, round, and calculate with decimals.

GRADE 5 • 5.NR.4

5.NR.4 "Read, write, and compare decimal numbers to the thousandths place, and round and perform operations with decimal numbers to the hundredths place to solve relevant, mathematical problems."

NAME _____

DATE _____

DECIMAL PLACE POWER

To add or subtract decimals, line up the decimal points and use zeros as placeholders when needed. To round to the nearest hundredth, look at the thousandths digit. If it is 5 or more, increase the hundredths digit by 1. To compare decimals, line up place values and add zeros so the decimals have the same number of places.

WORKED EXAMPLE

Find $7.36 + 2.48$.

1. Line up the decimal points.
2. Add the hundredths: $6 + 8 = 14$. Write 4 hundredths and regroup 1 tenth.
3. Add the tenths and ones: $3 + 4 + 1 = 8$ tenths, and $7 + 2 = 9$ ones.

Answer: 9.84

PRACTICE 6 problems

- 1** Write four and seventy-two thousandths as a decimal.

ANSWER _____

- 2** Write $<$, $>$, or $=$. 6.305 ____ 6.35

ANSWER _____

- 3** Round 18.746 to the nearest hundredth.

ANSWER _____

- 4** Find $12.64 + 5.27$.

ANSWER _____

- 5** Find $20.00 - 8.56$.

ANSWER _____

- 6** Find $9.30 - 4.67$.

ANSWER _____

APPLY IT Show your work

- 1** At a game store, a card pack costs \$4.85 and a game pin costs \$7.30. You pay with \$15.00. How much change should you get?

WORK SPACE

ANSWER _____

- 2** You bike 2.65 kilometers on Saturday and 3.40 kilometers on Sunday. How many kilometers do you bike altogether?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Jordan wrote $7.42 - 3.8 = 4.38$. Is Jordan correct? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write four and seventy-two thousandths as a decimal.	4.072
2	Write <, >, or =. 6.305 ____ 6.35	6.305 < 6.35
3	Round 18.746 to the nearest hundredth.	18.75
4	Find $12.64 + 5.27$.	17.91
5	Find $20.00 - 8.56$.	11.44
6	Find $9.30 - 4.67$.	4.63

PART 2 • APPLY IT

1. **\$2.85** Add the two costs: $\$4.85 + \$7.30 = \$12.15$. Subtract from $\$15.00$ to get $\$2.85$.
2. **6.05 kilometers** Add the distances: $2.65 + 3.40 = 6.05$ kilometers.

CHALLENGE

No. Write 3.8 as 3.80. Then $7.42 - 3.80 = 3.62$.

Accept 6.350 as an equivalent way to write 6.35 when comparing. Accept correct explanations that state 3.8 must be aligned as 3.80 in the challenge.