LESSON MAKER PRO

Decimal Decision Points

Round each decimal to the nearest thousandth.

GRADE 5 · 5.NBT.A.5

5.NBT.A.5 "Use place value understanding to round decimals to thousandths."

NAME _____ DATE _____

LOOK ONE PLACE RIGHT

The thousandths place is the third digit after the decimal point. Look at the digit just to its right: if it is 5 or greater, increase the thousandths digit by 1; otherwise, leave it as it is. Digits farther right are dropped.

WORKED EXAMPLE

Round 4.2768 to the nearest thousandth.

1. Find the thousandths digit: 6.
2. Look one place right: 8.
3. Since 8 is at least 5, increase 6 to 7 and drop the 8.

Answer: 4.277

PRACTICE 6 problems

1 Round 7.3142 to the nearest thousandth.

ANSWER _____

2 Round 2.4867 to the nearest thousandth.

ANSWER _____

3 Round 0.09356 to the nearest thousandth.

ANSWER _____

4 Round 5.9995 to the nearest thousandth.

ANSWER _____

5 Round 12.47049 to the nearest thousandth.

ANSWER _____

6 Round 0.00087 to the nearest thousandth.

ANSWER _____

APPLY IT Show your work

1 A racing game records your time as 18.43768 seconds. The scoreboard shows times to the nearest thousandth of a second. What time will it show?

WORK SPACE

ANSWER _____

2 A craft shop measures a piece of cord as 0.89567 meter. Its order form lists lengths to the nearest thousandth of a meter. What length should the shop enter?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Find two different decimals with exactly four digits after the decimal point that round to 3.250 to the nearest thousandth. Choose one that rounds down and one that rounds up. Explain why each works.

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Decision Points

GRADE 5 · 5.NBT.A.5

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Round 7.3142 to the nearest thousandth.	**7.314**
2	Round 2.4867 to the nearest thousandth.	**2.487**
3	Round 0.09356 to the nearest thousandth.	**0.094**
4	Round 5.9995 to the nearest thousandth.	**6.000**
5	Round 12.47049 to the nearest thousandth.	**12.470**
6	Round 0.00087 to the nearest thousandth.	**0.001**

PART 2 · APPLY IT

1. **18.438 seconds** The digit to the right of the thousandths place is 6, so round the 7 up to 8.
2. **0.896 meter** The digit to the right of the thousandths place is 6, so round the 5 up to 6.

CHALLENGE

3.2502 rounds down to 3.250 because the fourth digit is 2. 3.2498 rounds up to 3.250 because the fourth digit is 8 and rounding the 9 in the thousandths place carries to the hundredths place.

For answers that are whole numbers or end in zero, accept equivalent values such as 6 or 12.47. In the challenge, accept any valid pair with one value below 3.250 and one above it, each with exactly four decimal places and a correct explanation.