

Develop Rounding Whole Numbers

Read and try to solve the problem below.

A video game company spends \$117,290 developing a new game. How much does the company spend rounded to the nearest ten thousand dollars? How much does the company spend rounded to the nearest thousand dollars?



TRY IT



Math Toolkit

- hundred thousands place-value charts
- number lines
- index cards



DISCUSS IT

Ask your partner: Can you explain that again?

Tell your partner: I do not understand how ...

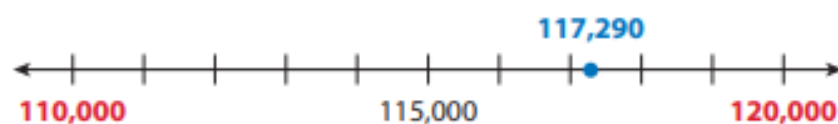
Explore different ways to understand how to solve a problem that involves rounding a multi-digit number.

A video game company spends \$117,290 developing a new game. How much does the company spend rounded to the nearest ten thousand dollars? How much does the company spend rounded to the nearest thousand dollars?

MODEL IT

You can use a number line to round \$117,290 to the nearest ten thousand.

Find the closest ten thousands that are less than 117,290 and greater than 117,290.



117,290 is between 110,000 and 120,000.

MODEL IT

You can use place value to round \$117,290 to the nearest thousand.

Find the closest thousands that are less than 117,290 and greater than 117,290.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
1	1	7	0	0	0
1	1	7	2	9	0
1	1	8	0	0	0

117,290 has 7 thousands, so it is between 117,000 and 118,000.

There are 10 hundreds in each thousand. Halfway between 0 hundreds and 10 hundreds is 5 hundreds. The number 117,290 has 2 hundreds.

CONNECT IT

Now you will use the problem from the previous page to help you understand how to solve problems that involve rounding multi-digit numbers.

- 1 Look at the first **Model It**. Which ten thousand is 117,290 closer to:
110,000 or 120,000?
- 2 Which ten thousand does 117,290 round to?
- 3 To the nearest ten thousand, what amount does \$117,290 round to?
.....
- 4 Look at the second **Model It**. Which thousand does 117,290 round to,
117,000 or 118,000? You can compare the number of hundreds in 117,290
to 5 hundreds to help you know whether to round up or down.
- 5 To the nearest thousand, what amount does \$117,290 round to?
.....
- 6 Choose any five-digit number. Write it here.
Explain how to round a five-digit number to the nearest ten thousand.

APPLY IT

Use what you just learned to solve these problems.

- 8 Mr. Gómez's company collects 32,376 water bottles to recycle. Mr. Gómez rounds this amount to the nearest ten thousand. What number does Mr. Gómez round the number of water bottles to? Show your work.

Solution

- 9 Gavin and his dad volunteer at a book drive for International Book Giving Day on February 14. The book drive collects 468,500 books. To the nearest thousand, how many books does the book drive collect? Show your work.

Solution

- 10 Round 649,418
to the nearest ten:
to the nearest hundred:
to the nearest thousand:
to the nearest ten thousand:
to the nearest hundred thousand:

