

Rounding

Sometimes you want an approximation of a number. One way to do this is to round the number. For example, 4,738 is 5,000 when rounded to thousands. The number 5,000 is said to be rounded "to the nearest thousand."

To round a number:

1. locate the place value to be rounded
2. examine the digit one place to the right

In the example 4,738, the number 4 is in the thousands place. If you check the hundreds place, you see that 7 is greater than 5. This means the 4 needs to be increased by 1.

3. If the digit to the right is 5 or larger, add 1 to the rounding place. If the digit to the right is less than 5, keep the rounding place the same.

<5

Here are some other examples:

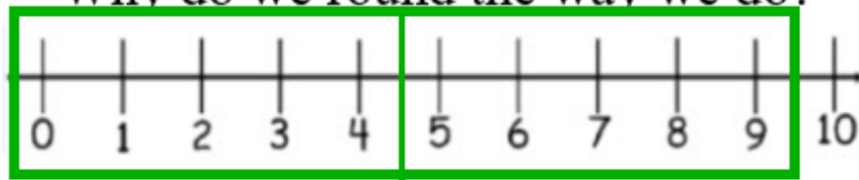
- Round 431.6271 to the nearest tenth.
1. locate the place value: 431.6271
 2. the hundredths place is 2
 3. Since 2 is smaller than 5, keep the tenths place the same.

- Round 17,389 to the nearest hundred.
1. locate the place value: 17,389
 2. the tens place is 8
 3. Since 8 is greater than or equal to 5, add 1 to the hundred place

17,400

$431.6000 = 431.6$

Why do we round the way we do?



Closer to \rightarrow <5
zero

Round Down

Closer to \rightarrow ≥ 5
next place value

Round up