

Rounding Decimals

Rounding to a given place value is a very simple process.

First, identify the place value that is given when asked to round.

For example, if a problem asks, "round the following number to the nearest hundredths place", identify where the hundredths place is and then underline that spot.

34.579
 ↖ → hundredths place

After you have found the location of the place value that they ask you to round to, look at the digit that is immediately to the right of the number you underlined. With the example given, a 9 is next to the underlined number. We will call the number to the right the "boss" because it is going to tell the underlined number what to do.

If the boss number is 4 or lower than 4, the underlined place value will stay the same.

If the boss number is 5 or higher than 5, the underlined digit will increase by one digit.

With the given example, the boss number is in the "5 or higher" category. As a result, the hundredths place will increase by 1 digit from the number 7 to the number 8!

After you either keep the underlined place the same or you increase it by one, drop all of the numbers after the underlined place value and that is your new number.

Rounding 34.579 to the nearest hundredth will give you 34.58

Directions: Round each of the following numbers to the nearest given place value.

1) Round 56.78 to the nearest tenth. 56.8

2) Round 2.389 to the nearest hundredth. 2.39

3) Round 0.1231 to the nearest thousandth. 0.123

4) Round 0.2452 to the nearest hundredth. 0.25

5) Round 2.15 to the nearest tenth. 2.2

6) Round 2.39125 to the nearest ten-thousandth. 2.3913

- 7) Round 209.12 to the nearest tenth. 209.1
- 8) Round 0.151 to the nearest hundredth. 0.15
- 9) Round 1.9277 to the nearest thousandth. 1.928
- 10) Round 0.94 to the nearest tenth. 0.9
- 11) Round 967.2325 to the nearest thousandth. 967.233
- 12) Round 0.95 to the nearest tenth. 1.0
- 13) Round 193.2462 to the nearest hundredth. 193.25
- 14) Round 10.245 to the nearest hundredth. 10.25
- 15) Round 2.1009 to the nearest thousandth. 2.101
- 16) Round 5.39 to the nearest tenth. 5.4
- 17) Round 45.67325 to the nearest ten-thousandth. 45.6733
- 18) Round 45.899 to the nearest hundredth. 45.90
- 19) Round 0.293 to the nearest tenth. 0.3
- 20) Round 0.5628 to the nearest thousandth. 0.563