

Decimals: Rounding—Explanation & Practice

PLACE VALUE CHART													
millions	hundred thousands	ten thousands	thousands	hundreds	tens	units (ones)	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	
5	4	6	3	8	6	2	.	3	4	7	2	3	5
<i>Place Value Chart 1</i>													

1. First identify the number to be rounded.

2. Underline it.

Example: Round to the nearest hundredth: 4.637 0.0651

3. Look at the number to the right of the underlined number.

4. If the number to the right of the underlined number is 5 or higher, then increase the underlined number by one and **delete** all the numbers to its right.

Example: 4.637 rounds to 4.64
 0.0651 rounds to 0.07

5. If the number to the right of the underlined number is less than 5, keep the underlined number the same and **delete** all the numbers to its right.

Example: 38.0725 rounds to 38.07

6. All the numbers to the left of the underlined number remain the same, with one exception: see the last example.

Examples:

Round to the nearest thousandths: 0.0457 rounds to 0.046

Round to the nearest tenths: 42.621 rounds to 42.6

Round to the nearest hundredths: 0.06521 rounds to 0.07

Round to the nearest tenths: 14.963 rounds to 15.0

Round each decimal to the given place value.

- | | | |
|------------------------------------|-------------------------------------|-----------|
| 1. 0.074 (tenths) | 2. 9.138 (tenths) | 1. _____ |
| | | 2. _____ |
| 3. 26.349 (tenths) | 4. 96.4501 (tenths) | 3. _____ |
| | | 4. _____ |
| 5. 65.34498 (hundredths) | 6. 13.01264 (hundredths) | 5. _____ |
| | | 6. _____ |
| 7. 517.677 (hundredths) | 8. 840.156 (hundredths) | 7. _____ |
| | | 8. _____ |
| 9. 2.09181 (thousandths) | 10. 6.27958 (thousandths) | 9. _____ |
| | | 10. _____ |
| 11. 79.4625 (thousandths) | 12. 51.00439 (thousandths) | 11. _____ |
| | | 12. _____ |
| 13. 0.04195 (ten-thousandths) | 14. 0.003642 (ten-thousandths) | 13. _____ |
| | | 14. _____ |
| 15. 4.37628 (ten-thousandths) | 16. 16.111919 (ten-thousandths) | 15. _____ |
| | | 16. _____ |
| 17. 0.635457 (hundred-thousandths) | 18. 0.009123 (hundred-thousandths) | 17. _____ |
| | | 18. _____ |
| 19. 7.880102 (hundred-thousandths) | 20. 11.732405 (hundred-thousandths) | 19. _____ |
| | | 20. _____ |
| 21. 1.49256 (nearest whole number) | 22. 5.60032 (nearest whole number) | 21. _____ |
| | | 22. _____ |

Answers:

1. 0.1
2. 9.1
3. 26.3
4. 96.5
5. 65.34
6. 13.01
7. 517.68
8. 840.16
9. 2.092
10. 6.280
11. 79.463
12. 51.004
13. 0.0420
14. 0.0036
15. 4.3763
16. 16.1119
17. 0.63546
18. 0.00912
19. 7.88010
20. 11.73241
21. 1
22. 6