



Rounding

Numbers can be rounded to any degree of accuracy. The usual method of rounding is:

- Find the last digit you wish to include.
- If the digit immediately to the right of it is 5 or above, then increase your digit by 1. Otherwise, (if the digit immediately to the right of it is 4 or less), do not change it.

Examples

(a) Round 12.8417154 to three decimal places.

We find the third decimal place (the digit 1) and look to the right (the digit 7). Since this is a 7 we round up (our 1 becomes a 2). That is, 12.8417154 rounds up to 12.842 (3 dec. pl.)

(b) Round 2.56499 to two decimal places.

We find the second decimal place (the digit 6) and look to the right (the digit 4). Since this is a 4 we round down. That is, 2.5649 rounds down to 2.56 (2 dec. pl.)

(c) 251370 rounded to nearest thousand is 251000.

(c) 23.58 rounded to the nearest unit is 24.

Exercises

1. Round:

- (a) 1236 to the nearest hundred
(b) 35.58 to the nearest 10
(c) 23.681 to the nearest tenth

2. Round the following to 3 decimal places

- (a) 12.54948 (b) 10.35755 (c) 0.999543

3. Round the following to 2 decimal places

- (a) 0.00052834 (b) 0.56666 (c) 384.895

Answers

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|---------------|------------|------------|
| 1. (a) 1200 | (b) 40 | (c) 23.7 |
| 2. (a) 12.549 | (b) 10.358 | (c) 1.000 |
| 3. (a) 0.00 | (b) 0.57 | (c) 384.90 |