

# Rounding

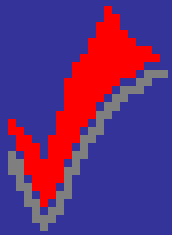
## Objective:

- Round Decimals to a certain place value
- Understand the rules when rounding
- Be able to do this with accuracy when finding the mean, median, mode and range

Thousands	Hundreds	Tens	Ones	.	Tenths	Hundredths	Thousandths	Ten Thousandths	Hundred Thousandth	Millionths
	1	10	100	.	0.1	0.01	0.001	0.0001		



**Decimal  
point**



# The Vocabulary

- Rounding
- Approximately
- Nearest
- Hundredths
- Place value
- Almost
- Close to
- Estimation
- Tenths
- Thousandths
- Reasonable
- Nearly

# Rounding to the Nearest Hundredth

Since the 5 is in the hundredth place, we must look at the 6 to round

  
26.256

**Rounded  
Answer:**

## RULES FOR ROUNDING

1. Underline the number in the **place value** you will round.
2. Look at the number to the right of the underlined number.
3. If the number to the right is **0, 1, 2, 3, or 4**, then the underlined number **stays the same**.
4. If the number to the right is **5, 6, 7, 8, or 9**, then the underlined number needs to **go up one more number**.
5. Every number to the right of the underlined disappears

# Rounding To the Nearest Hundredth

Since the “7” is five or higher we are rounding up. The zero becomes an one.

5.207



**Rounded Answer:**

**5.21**

## RULES FOR ROUNDING

1. Underline the number in the **place value** you will round.
2. Look at the number to the right of the underlined number.
3. If the number to the right is **0, 1, 2, 3, or 4**, then the underlined number **stays the same**.
4. If the number to the right is **5, 6, 7, 8, or 9**, then the underlined number needs to **go up one more number**.
5. Every number to the right of the underlined number **disappears**.

# Rounding to the Nearest Tenth

Find the mean of the following numbers:

34, 23, 45, 21, 17, 25, 56

Find the Total: 221

Divide by 7 : 31.257142857

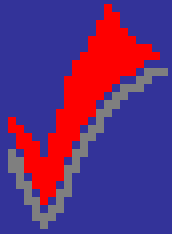
Rounding to the nearest tenth:



**31.25** Rounded Answer:

## RULES FOR ROUNDING

1. Underline the number in the **place value** you will round.
2. Look at the number to the right of the underlined number.
3. If the number to the right is **0, 1, 2, 3, or 4**, then the underlined number **stays the same**.
4. If the number to the right is **5, 6, 7, 8, or 9**, then the underlined number needs to **go up one more number**.
5. Every number to the right of the underlined number becomes a zero.



# Review the vocabulary

- Rounding
- Approximately
- Nearest
- Hundredths
- Place value
- Almost
- Close to
- Estimation
- Tenths
- Thousandths
- Reasonable
- Nearly

**These Skills can be applied to rounding to any place value. Keep the rules in mind for all place values.**

Practice: Find the mean of the following data sets.

1. 3.4 , 5.6 , 1.2 , 2.3 , 2.1 , 7.8 , 3.7 – round to the nearest hundredth
2. 23, 45, 12, 8, 16, 35, 28 , 7 - round to the nearest tenth