

## Significant Figures

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### Identification Rules

1. Nonzero numbers are always significant.
  2. Final zeros after the decimal point are significant.
  3. Zeros between two significant digits are significant.
  4. Zeros for spacing to the decimal point are not significant.
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### Practice

Identify the number of significant figures in each of these numbers.

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|-----------|--------------|
| 1. 1      | 5. 100100    |
| 2. 1.0    | 6. 105100.10 |
| 3. 10     | 7. 0.0031    |
| 4. 10.701 | 8. 0.30060   |
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### Operation Rules

The result of any calculation cannot be more precise than the least precise measurement.

1. Addition and Subtraction - Round to the least precise decimal place.
  2. Multiplication and Division - Round to the least precise number of significant figures.
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### Practice

Solve the following problems to the correct number of significant figures.

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|---------------------------|-------------------------------------|
| 1. $1.007 + 0.36 =$       | 5. $10.550 - 55.000 \times 0.10 =$  |
| 2. $10.5 - 1.04 =$        | 6. $100 \div 56.01 + 3.1 =$         |
| 3. $9.71 \times 3.6976 =$ | 7. $0.05 \times 10.5 \times 5.10 =$ |
| 4. $100 \div 3.1416 =$    | 8. $10.0 \div 4.67 \times 0.30 =$   |