

Math Sheet

Name _____ Score _____ Teacher _____ Date _____

Significant Figures Rules

Use the spelling of a measured value to read its precision.

Whole-number trailing zeroes without a decimal mark do not count on this sheet. Scientific notation makes intended precision explicit.

Measured and exact values

Significant figures describe measured precision. Counted or defined exact values do not limit a calculation.

12.0 **Significant digits: 3**

Nonzero and interior zeroes

Every nonzero digit counts. A zero between significant digits also counts.

4.07 **Significant digits: 3**

Leading and trailing zeroes

Leading placeholder zeroes do not count. Written trailing zeroes after a decimal mark do count.

0.0040 **Significant digits: 2**

Whole values and scientific notation

Here, trailing zeroes in a whole numeral without a decimal mark do not count. In scientific notation only mantissa digits count; the exponent never counts.

1.200×10^3 **Significant digits: 4**

Addition and subtraction

Round the exact final result to the least precise decimal place among the operands.

$1.20 + 2.3$

Rounded result: 3.5

Multiplication and division

Round the exact final result to the fewest significant digits among the operands.

2.85×1.0

Rounded result: 2.8

Exact halfway choices

Half even chooses an even final digit. Half up sends an exact tie away from zero. The worksheet prints the selected rule.

Target digits: 2

2.85

Half even: 2.8

Half up: 2.9

Round once at the end

Keep the exact value through the calculation. Round only the final result and retain zeroes that show its precision.

Target digits: 3

9.995

Rounded result: 10.0