

A given number may contain both significant and nonsignificant digits. The rules for determining which digits in a given number are significant are as follows.

RULE 1: All nonzero digits are significant.

Number	Significant Digits	Number of Significant Digits
487	4, 8, and 7	<input type="text"/>
65.211	6, 5, 2, 1, and 1	<input type="text"/>
12,345,678.54	1, 2, 3, 4, 5, 6, 7, 8, 5, and 4	<input type="text"/>
9,700	9 and 7	<input type="text"/>

RULE 2: Zeros in between nonzero digits are significant.

Number	Significant Digits	Number of Significant Digits
1,006	1, 0, 0, and 6	<input type="text"/>
2,309,005	2, 3, 0, 9, 0, 0, and 5	<input type="text"/>
51.0007	5, 1, 0, 0, 0, and 7	<input type="text"/>

RULE 3: Trailing zeros in a decimal are significant.

Number	Significant Digits	Number of Significant Digits
21.30	2, 1, 3, and 0	<input type="text"/>
798.00	7, 9, 8, 0, and 0	<input type="text"/>
40.0	4, 0, and 0	<input type="text"/>

Math Note

Trailing zeros are significant when there is a decimal point in the number.

RULE 4: Zeros on the left of the first nonzero digit are NOT significant.

Number	Significant Digits	Number of Significant Digits	Nonsignificant Digits
0.123	1, 2, and 3	3	<input type="text"/>
0.04	4	1	<input type="text"/>
0.060	6 and 0	2	<input type="text"/>
0.000385	3, 8, and 5	3	<input type="text"/>

RULE 5: Trailing zeros in an integer may or may not be significant due to rounding.

Number After Rounding	Rounded from 298	Significant Digits	Number of Significant Digits	Nonsignificant Digits
300	To the nearest 10	3 and 0	2	<input type="text"/>
300	To the nearest 100	3	1	<input type="text"/>

RULE 5 is applicable only when rounding numbers.