

Significant Digits, Decimal Places and Scientific Notation

Input Number (as text)	0010.0400
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Decimal Places

Number of Decimal Places to Most Significant Digit

=value()	10.04
=abs()	10.04
=log10()	1.00
=floor()	1
=negative	-1

Number of Decimal Places to Least Significant Digit

=find('.') decimal	5
=isnumber()	TRUE

TRUE, yes decimal, rightmost side is Least Significant Digit

=len()	9
=length-decimal	4

FALSE, no decimal, find rightmost non-zero number

=find('1')	3	3
=find('2')	#VALUE!	
=find('3')	#VALUE!	
=find('4')	7	7
=find('5')	#VALUE!	
=find('6')	#VALUE!	
=find('7')	#VALUE!	
=find('8')	#VALUE!	
=find('9')	#VALUE!	
=max()		7
=length-max	2	
=negative	-2	

Use if() statement to grab correct Least Significant Digit

=if()	4
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Significant Digits

Number of Significant Digits

=least-most sig.	5
= +1 (account most)	6

Scientific Notation

Extract Most/Least Significant Digit Locations

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TRUE, yes decimal, location = decimal + most/least locations
=decimal+most-1              3
=decimal+least                9
```

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FALSE, no decimal, location = length + most/least locations
=length+most                  8
=decimal+least                13
```

```
Use if() statement to grab correct Significant Digit Locations
=if() (most sig.)             3
=if() (least sig.)            9
```

```
Extract Digits: first digit only / Rest of number
=substitute()                  00100400
=mid() (first digit)           1
=mid() (remaining #s)          00400
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Required Decimal?
=if()                          .
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Build Scientific Notation Number

<pre>=concat()</pre>	<pre>1.00400 x 10 ^ 1</pre>
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Original Number                0010.0400
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