

Number Format Codes

Number format codes are strings of symbols which define how Excel displays that data in your cells

Each number format code is made up of up to 4 blocks, separated by a semicolon (;)

Example Sect 1; Sect 2; Sect 3; Sect 4

These sections correspond to different types of data as shown below

| § 1 | § 2 | § 3 | § 4 |
|-----------------|-----------------|------|------|
| Positive values | Negative values | Zero | Text |

The behavior for each section depends on how many sections are defined

Cell Section Format Behavior

| Legend: | Section 1 | Section 2 | Section 3 | Section 4 |
|----------|-----------------|-----------|-----------|-----------|
| Sections | Number Behavior | | | |
| 4 | Positive | Negative | Zero | Text |
| 3 | Positive | Negative | Zero | Text |
| 2 | Positive | Negative | Zero | Text |
| 1 | Positive | Negative | Zero | Text |

Changing font color

You can change the color of the section by using a simple format code

[Color Name]

To use you simply set the color in the section you wish to color

Example [Red]General;[Blue]General

Complete list of color codes

| | | | |
|---------|--------|-------|------|
| Black | Green | White | Blue |
| Magenta | Yellow | Cyan | Red |

The **General** message just tell Excel to represent the number as entered by the user. Be careful when using this for negative numbers, as you only get the value!

Adding Text

You can add text around numbers is a section in two ways

Single Characters

For single characters simply type a backslash before the character

Eg. \@General

| | |
|-----------|------------|
| 1234.567 | @1234.567 |
| -1234.567 | -@1234.567 |
| 0 | @0 |
| Text | Text |

Note: Text is not affected in this example

Text Strings

To add an entire string to a number surround the string in quotes (" ")

Eg. General" units"

| | |
|-----------|-----------------|
| 1234.567 | 1234.567 units |
| -1234.567 | -1234.567 units |
| 0 | 0 units |
| Text | Text |

Note: Again, text is not affected by this format code (since that section is not explicitly listed)

Eg. General" unit A";General" unit B";General" unit C";General" unit D"

| | |
|-----------|-----------------|
| 1234.567 | 1234.567 unit A |
| -1234.567 | 1234.567 unit B |
| 0 | 0 unit C |
| Text | Text unit D |

Note that there is no representation of the the fact that the negative value is negative. Our definition of the negative section did not include one.

Special Characters

The following characters can be added to a format section without being escaped

| | | |
|---------|-----|-----|
| \$ | + - | <=> |
| () | { } | ^ |
| ' | : | / |
| ~ | & | ! |
| (space) | | |

Decimals places, Digits, and Commas

| Symbol | Description | Summary |
|--------|---------------|---------------------|
| 0 | Zero | Forced Digit |
| ? | Question Mark | Aligned Digit |
| # | Pound Sign | Un-Forced Digit |
| . | Period | Decimal Point |
| , | Comma | Thousands Separator |
| * | Asterisk | Repeating Character |
| _ | Underscore | Space Modifier |

Examples Data Result

Zero (0)

| Format | Result |
|--------|---------|
| 0 | 0.00 |
| 0.123 | 0.12 |
| 1234 | 1234.00 |

Question Mark (?)

| Format | Result |
|--------|--------|
| 0 | 0.?? |
| 0.123 | 0. |
| 1234 | 1234. |

Pound Sign (#)

| Format | Result |
|--------|--------|
| 0 | ## |
| 0.123 | 0.12 |
| 1234 | 1234. |

Period (.) The period in a number format code specifies the location of the decimal point

Comma (,)



Decimals places, Digits, and Commas (cont)

| Format | \$??,???.00 |
|-----------|--------------|
| 1234.567 | \$ 1,234.57 |
| -1234.567 | -\$ 1,234.57 |
| 0 | \$.00 |
| 1234 | \$ 1,234.00 |

Asterisk (*)

| Format | *=0.## |
|-----------|------------|
| 1234.567 | ===1234.57 |
| -1234.567 | --=1234.57 |
| 0 | =====0. |

Underscore (_)

| Format | _(#.##_);(##.##) |
|-----------|------------------|
| 1234.567 | 1234.57 |
| -1234.567 | (1234.57) |
| 0.123 | .12 |

Source

The content and examples for this cheat sheet are taken from this website:

<http://www.exceltactics.com/definitive-guide-custom-number-formats-excel/>

I have condensed the information in order to fit it on a cheat sheet.

Fractions, Percentages, and Scientific Notation

| Symbol | Description | Notation |
|--------|---------------|------------|
| / | Forward Slash | Fraction |
| % | Percent Sign | Percentage |
| E | Exponential | Scientific |

Fractions

Fraction notation rounds values to the nearest possible fraction. Remember that fractions can be either proper, or improper.

| Examples | Data | Result |
|----------|------|--------|
|----------|------|--------|

Reduced Fractions

Fractions, Percentages, and Scientific Notation (cont)

| Format | # ???/??? |
|--------|-----------|
| 0.23 | 23/100 |
| 0.25 | 1/4 |
| 1 | 1 |
| 1.25 | 1 1/4 |

| Format | # ??/?? |
|--------|---------|
| 0.23 | 3/13 |

Fixed Base Fractions

It's possible to force Excel to use a specific denominator by specifying it in the format code

| Format | ###/15 |
|--------|--------|
| 0.23 | 3/15 |
| 0.25 | 4/15 |
| 1.25 | 1 4/15 |

Percentages (%)

| Format | ##% |
|--------|------|
| 0.235 | 24% |
| 0.25 | 24% |
| 1 | 100% |
| 1.25 | 125% |
| 0 | % |

You can also specify fractional percentages

| Format | ##/##% |
|--------|---------|
| 0.235 | 23 1/2% |
| 0.25 | 25% |

You can specify the number of digits with decimal places

| Format | #.0% |
|--------|--------|
| 0.235 | 23.5% |
| 0.25 | 25.0% |
| 1 | 100.0% |
| 1.25 | 125.0% |
| 0 | .0% |

Scientific Notation

Fractions, Percentages, and Scientific Notation (cont)

Excel uses E+ notation for exponential values. The format code in front of the E+ describes the relevant digits, and another format code on the other side of the E+ describes the handling of the exponent.

| Format | #E+# |
|----------------|-------|
| 0.000000000123 | 1E-10 |
| 456000000000 | 5E+11 |
| 1 | 1E+0 |
| 1.25 | 1E+0 |
| 0 | 0E+0 |

| Format | 0.00E+00 |
|----------------|----------|
| 0.000000000123 | 1.23E+10 |
| 456000000000 | 4.56E+11 |
| 1 | 1.00E+00 |
| 1.25 | 1.25E+00 |
| 0 | 0.00E+00 |

