

Writing with Numbers

IEEE General Rule:

zero–ten = written

11+ = numerals

percentages



For scientific and statistical contexts:

1% 75% 63%

non-technical contexts, written with the word percent:

one percent
seventy-five percent
sixty-three percent

fractions



Uncommon fractions use numerals:

1/77 7/30 8/11

Common fractions are written:

a half
two-thirds
three-quarters

measurements



If the measurement is written out, follow the general rule: six miles, 110 kilograms, nine centimeters

If the measurement is abbreviated, use numerals:

6 mi, 110 kg, 9 cm

dates

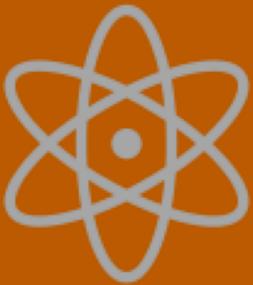


Month day, year
April 6, 1990

Decades
1990s, '90s, the nineties

Follow the general rule for centuries:
the 21st century

very small numbers



Use scientific notation:
 422×10^{-7}

Or use prefixes:
micro-, nano-, pico-, etc.

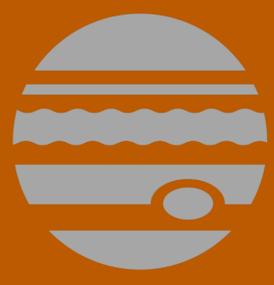
large numbers



Numeral + million
billion
trillion

5.3 million
7 billion
1 trillion

very large numbers



Use scientific notation:
 83×10^{15}

Or use prefixes:
mega-, giga-, tera-, etc.

except

Do not start a sentence with a numeral. Spell out the number or reword the sentence to start with a different word. (E.g., 472 soldiers came to the memorial. → Four-hundred seventy-two soldiers came to the memorial. → The memorial welcomed 472 soldiers.)

When the general rule gives you a combination of numbers in numerals and written-out numbers within the same phrase, change them all to numerals. (E.g., There were four to 13 variables. → There were 4 to 13 variables.)

If a chunk of text has many written numbers or a combination of both forms in a small space, to facilitate reading, opt to change them to numerals despite the general rule.

Other Number Tips

Ordinals (first, second, third, etc.)

Follow the general rule for writing out or using numerals.

Do not use as a day when the month is also mentioned.
May 25th, 2004 → May 25, 2004

For military units, follow the general rule.
The 28th Brigade
The Second Armored Brigade Combat Team

Letters in ordinals (-st, -nd, -rd)
are not superscripts.



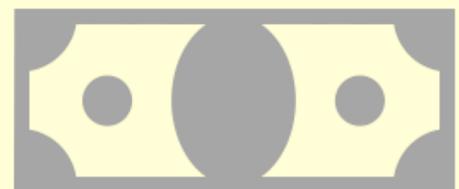
Add “s” for Plural

Add an “s” to a numeral, or “es” or “s”
to the written out form.

twos, sixes, sixties, 300s, the 1980s



Currency



Write out the long-hand name of uncommonly known currencies at first use, and then use the abbreviation for that currency.

three hundred Canadian dollars = C\$300 *or* Can\$300
\$749 New Zealand dollars = NZ\$749
\$15.69 Australian dollars = A\$15.69
ninety-eight Mexican pesos = Mex\$98

50 euros = €50 (EUR 50)
332 yen = ¥332 (JPY 332)
55.5 bitcoins = BTC 55.5 (XBT 55.5)
100 yuan renminbi (100 yuan) = ¥100 *or* RMB 100 (CNY 100)

Sources:

The Chicago Manual of Style. Chicago, IL, USA: University of Chicago Press, 2017.

IEEE Editorial Style Manual for Authors. Piscataway, NJ, USA: IEEE, 2019.

