



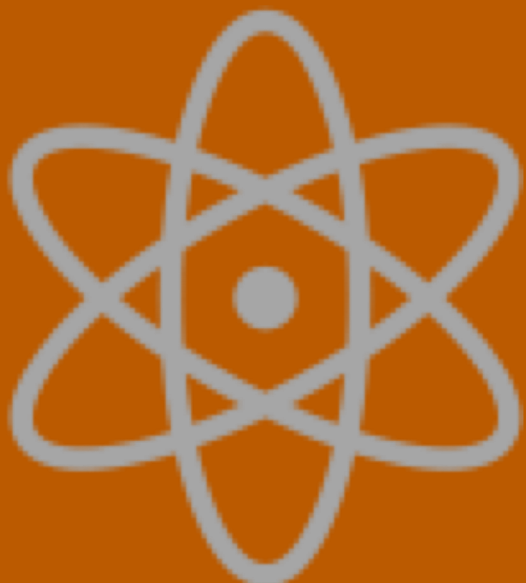

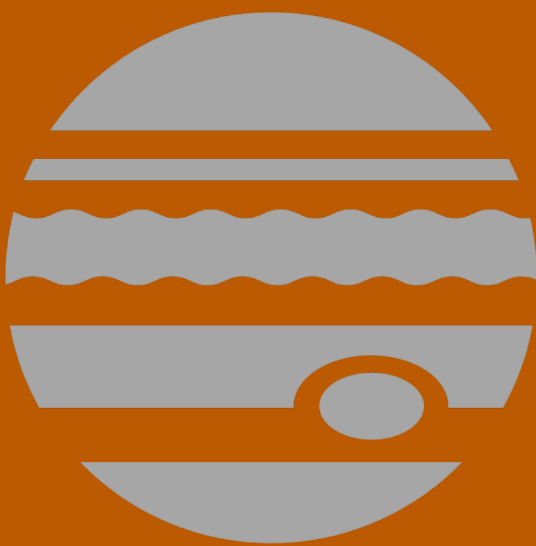


Writing with Numbers

IEEE General Rule:

zero–ten = written
11+ = numerals

<div>percentages</div> <div></div> <div>For scientific and statistical contexts: 1% 75% 63%</div> <div>non-technical contexts, written with the word percent: one percent seventy-five percent sixty-three percent</div>	<div>fractions</div> <div></div> <div>Uncommon fractions use numerals: 1/77 7/30 8/11</div> <div>Common fractions are written: a half two-thirds three-quarters</div>	<div>measurements</div> <div></div> <div>If the measurement is written out, follow the general rule: six miles, 110 kilograms, nine centimeters</div> <div>If the measurement is abbreviated, use numerals: 6 mi, 110 kg, 9 cm</div>	<div>dates</div> <div></div> <div>Month day, year April 6, 1990</div> <div>Decades 1990s, '90s, the nineties</div> <div>Follow the general rule for centuries: the 21st century</div>
<div>very small numbers</div> <div></div> <div>Use scientific notation: 422 x 10⁻⁷</div> <div>Or use prefixes: micro-, nano-, pico-, etc.</div>	<div>large numbers</div> <div></div> <div><div>Numeral</div><div>+</div><div>million billion trillion</div></div> <div>5.3 million 7 billion 1 trillion</div>	<div>very large numbers</div> <div></div> <div>Use scientific notation: 83 x 10¹⁵</div> <div>Or use prefixes: mega-, giga-, tera-, etc.</div>	

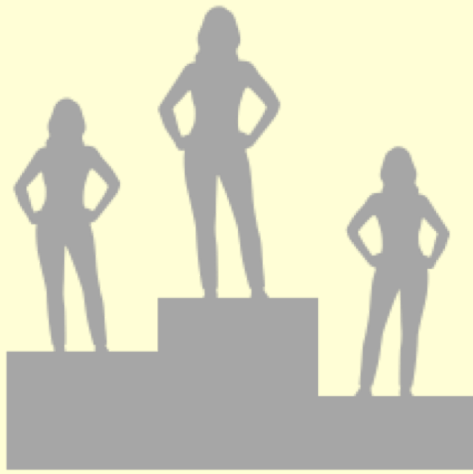
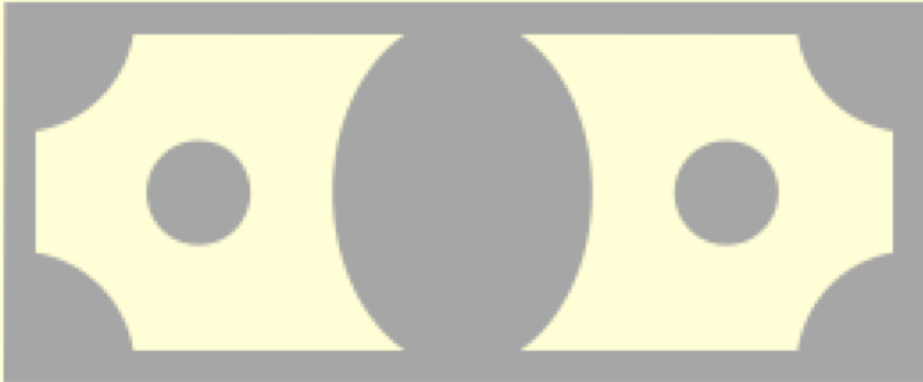

except

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

<div>Ordinals (first, second, third, etc.)</div> <div>Follow the general rule for writing out or using numerals.</div> <div>Do not use as a day when the month is also mentioned. May 25th, 2004→ May 25, 2004</div> <div>For military units, follow the general rule. The 28th Brigade The Second Armored Brigade Combat Team</div> <div>Letters in ordinals (-st, -nd, -rd) are not superscripts.</div> <div></div>	<div>Currency</div> <div></div> <div>Write out the long-hand name of uncommonly known currencies at first use, and then use the abbreviation for that currency.</div> <div>three hundred Canadian dollars = C\$300 <i>or</i> Can\$300 \$749 New Zealand dollars = NZ\$749 \$15.69 Australian dollars = A\$15.69 ninety-eight Mexican pesos = Mex\$98</div> <div>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 <i>or</i> RMB 100 (CNY 100)</div>
<div>Add “s” for Plural</div> <div>Add an “s” to a numeral, or “es” or “s” to the written out form.</div> <div>twos, sixes, sixties, 300s, the 1980s</div> <div></div>	

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.

