
NUMBERS

Arabic versus Roman. Arabic numbers are generally easier to understand than Roman: 3 or 4 rather than III or IV; 1988 rather than MCMLXXXVIII.

Beginning of a sentence. Numbers at the beginning of a sentence are spelled out, but most sentences can be worded so as not to begin with a number. In the sentence "Four thousand eight hundred fifty tons was produced in 1986, and 5,180 tons in 1987," convenience requires that both quantities be expressed in figures. Rewrite as "The production was 4,850 tons in 1986 and 5,180 tons in 1987."

Compound modifier. Numbers less than 100 preceding a unit modifier containing a figure are spelled out:

twelve 6-inch guns
two $\frac{3}{4}$ -inch boards
120 8-inch boards
three 4-foot boulders

Dates. In Survey reports dates are given as follows: June 20 (not June 20th), the 20th of June, the 2d or 3d (not 2nd or 3rd). In the Department of Defense the day and month are written "20 June," and in material quoted from that Department the style should not be changed.

For consecutive years use the contracted forms: 1934–35, 1890–91, 1986–87, 1900–10, 1907–8 (but, on a change of century, 1895–1902, and to avoid three ciphers together, 1900–1901). Fiscal years, water years, or meteorological years are written the same way: 1968–77.

A.D. precedes the year; B.C. follows the year: A.D. 937, 254 B.C.; A.D. 937 means anno Domini (in the year of our Lord) 937; 254 B.C. means the 254th year before Christ.

Decimals. Decimals are expressed in figures. A zero should be supplied before a decimal point if there is no unit (both in text and in footnotes), and zeros should be omitted after a decimal point unless they indicate exact measurement: 0.25 percent, 90 percent silver. (See p. 119 for discussion of significant figures.)

Doubled-up numbers. Avoid doubling up figures as shown in the following example: "The final survey made the total distance of levels run in 1976 38,307 miles." Rewrite as "Including the final survey, the total distance of levels run in 1976 was 38,307 miles."

Fractions. Fractions that stand alone are spelled out, but where the fraction is joined to a whole number figures are used: one-eighth, three-fourths, $3\frac{1}{2}$, $1\frac{3}{4}$ (but $\frac{1}{2}$ page to $1\frac{3}{4}$ pages).

Write half a mile, a quarter of a mile (not a half mile or $\frac{1}{2}$ mile), but $\frac{2}{3}$ mile (1 kilometer).

Figures are used for fractions in a unit modifier: $\frac{1}{2}$ -inch pipe, $\frac{7}{8}$ -point rise, 0.9-inch spacing.

Indefinite expressions. Indefinite expressions are spelled out: the early seventies, in the eighties (but the 1980's).

Large numbers. In large numbers, the word "million" or a similar group term is spelled out: 20 million, 3 billion, \$5 million (but use figures if other numbers in a series are given in figures: "The appropriation in 1952 was \$780,000 and in 1953 was \$2,000,000").

Ordinal numbers. Except in formal writing, in bibliographic citations of an edition of a work, and for day preceding month, figures are used for ordinal numbers beginning with 10th: 82d Congress, 20th century, 49th parallel, 141st meridian.

When ordinal numbers appear in juxtaposition and one of them is 10th or more, figures are used for both: the 1st session of the 82d Congress, the 9th and 10th Congresses.

Quantities and measurements. Age, degree, measurement, money, percentage, proportion, time, and similar matters are expressed in figures: 6 years old, 27°, 45 miles, 9 bushels, 24 pages, 16 by (or \times) 24 inches, \$1.54, 17 percent, ratio of 1 to 4, scale of 1:62,500, 10 o'clock, 10 p.m., 4:30 p.m. (but four centuries, three decades).

Related numerical expressions. Figures are used in a group of two or more related numerical expressions, whether or not each number is less than 10: 2 gold mines, 3 silver mines, and 8 copper mines; 3 wells and 11 springs; tested at 4, 28, and 160 days.

A unit of quantity or measurement, always expressed in figures (except in round numbers), does not affect the use of figures or other related or connected numerical expressions: "The five mines are 20 miles southwest of the town."

Round numbers. Round numbers are spelled out: almost a thousand years, nearly a hundred feet, about a hundred wells (but 115 wells).

Serial numbers. Figures are used for serial numbers: locality 259, Bulletin 725.

Singular nouns. Avoid the common mistake of assigning plural verbs to numbers that have singular contexts, almost always in the passive voice:

Eight hundred feet of sandstone and shale *were* [was] measured. (Not 800 individual feet but a single section of rock totaling 800 feet. Recast as, "They [we, I, she, he] measured 800 feet of sandstone and shale.")

Three million years *were* [was] required to excavate the gorge. (A single time lapse of 3 million years. Try recasting with "gorge" as the subject: "The gorge was excavated in 3 million years.")

Four years *were* [was] spent in the field and 8 years *were* [was] spent in the office. (Problem can be avoided by recasting: Field-work took 4 years; office work took 8.)

See also page 126.

NOTEWORTHY NUMERICAL CONVERSIONS

[A la *Johns Hopkins Magazine*, as conceived by Solomon W. Golomb, University of California]

One-half Soviet press agency = 1 demitasse

Ten cards = 1 decacard

Two thousand mockingbirds = 2 kilomockingbirds

Two tribes = 1 diatribe

One-trillionth dilly = 1 picodilly

One billion antics = 1 gigantic

One-millionth fish = 1 microfiche

Also:

10^{21} picolos = 1 gigolo

10^{12} microphones = 1 megaphone

10^3 bicycles = 1 kilocycle

10 millipedes = 1 centipede

10 monologues = 5 dialogues

1 milli-Helen = the face that launced 1 ship
