Stupid Interpreter Tricks

Temperature Conversion

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INTERPRETING WOULD BE DULL indeed if all it involved were changing one language into another. Thanks to the metric system, however, interpreters can rise to the invigorating challenge of unit conversion.

Units of mass, length, time, or their derivatives—weight, area, volume, velocity, and acceleration—convert when multiplied by one. It's true that sometimes you have to write "one" in slightly unusual form, and multiply by "one" more than once to get the result, but any child can multiply by one.

Multiplication by one is easier said than done, however, when you are trying to keep up with the rest of the conversation as a simultaneous interpreter. As the speaker describes in detail the advantages of his company's 11,000-m² plant, the interpreter can take pencil to paper, recall that there are 2.54 centimeters to an inch and 144 square inches to a square foot, and set up the multiplication by one:

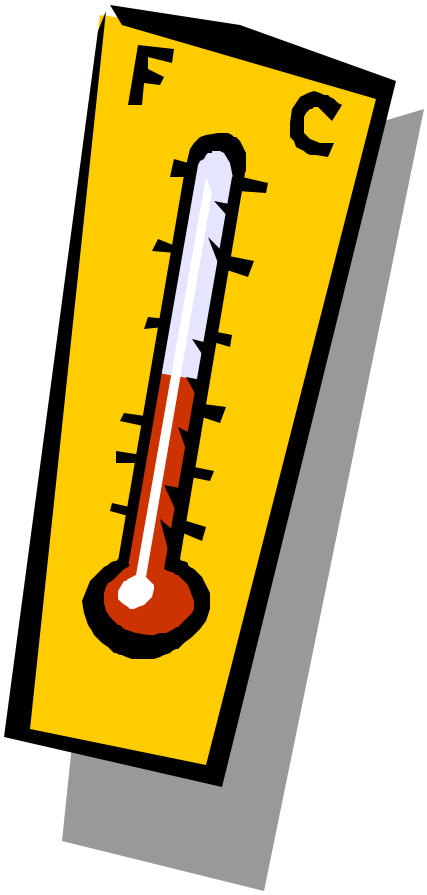
$(1\ in^2/6.45\ cm^2) \times (ft^2/144\ in^2) = ft^2/(6.45 \times 144\ cm^2)$, or $ft^2/929\ cm^2$,

which is clearly one, since the square inches cancel out, and one times one is one. The interpreter cheated a little by squaring 2.54 before putting it in the first denominator, but this is understandable, because the speaker has by now embarked upon a detailed enumeration of the various fixtures and fittings that make his plant so wonderful, and the interpreter doesn't want to waste any time on conversion.

Because every linguist knows that "centi-" has something to do with a hundred, and that a hundred times a hundred has something to do with four zeros, the interpreter multiplies this first "one" by a second "one" just as simple, to get:

$(ft^2/929\ cm^2) \times (10{,}000\ cm^2/m^2) = 10{,}000\ ft^2/929\ m^2 = 1$

At this point we can look at it as an equation or as a fraction, and junior high algebra tells us that it is okay to multiply or divide both sides of the equation (or by arithmetic, top and bottom of the fraction) by the same thing, and since the speaker has already asked for the next slide in his presentation, we'll go ahead and divide numerator and denominator by just plain 929 and conclude that there are



11 square feet in a square meter. Well, almost. By now the speaker is going over the financial details of the next slide with his laser pointer, and members of the audience will generously overlook the extra 34 in^2 per m^2 as insignificant.

Satisfied that the interpreter has at least gotten them into the ballpark, they refocus their rapt attention the bouncing ball of the laserpointer as the wondrous financial details are unfolded before them. Pretty stupid trick, huh?

Of course it is much easier on the interpreter to have decided beforehand to—as soon as the speaker starts talking about square meters—add a zero to the integer and slap on an extra 10 percent tip.

For the benefit of metric-speakers in the audience, the interpreter conversely plans to move the decimal point one place to the left and then shave off an extra tenth whenever English-speakers brag about their 121,000-ft² facilities and nonchalantly describe to the audience yet another 11,000-m² factory. Child's play.

Unfortunately, no such cheap trickery will work when the speaker inside a meat chiller at a packing plant explains to the metric-speaking tour group that the ambient temperature is 30 degrees Fahrenheit. No amount of multiplication by one through chattering teeth is going to explain to the metric-speakers just how cold it is in there. For that you have to add and subtract.

Forget the complicated formula they tried to teach you in school—it is not a do-it-in-your-head formula at all and will only distract you from the speaker's message. The important thing to remember is that in English culture the distance between ice and boiling water is divided into 180 tick marks (212°F – 32°F), whereas metric-speaking cultures use only 100 tick marks to divide up the same difference. To find the ratio of one subdivision to the other we simply divide 180°F by 100°C, simplify the fraction and voilá: 9°F = 5°C, so °F/°C = 9/5 and °C/°F = 5/9. "I knew that," I hear you say, "but how does that help me finish interpreting the explanation so that I can get out of the meat chiller?" It was at this stage that Al Bork said, "When he goes up or down by nines, you go up or down by fives." Suddenly everything clicked into place.

What Albert really meant was this: "you know the freezing point of water in both systems, and the ratio between them stands as 9 to 5, so when he is nine tick marks away from that point your equivalent will be only five tick marks away. In the case in point the

difference was only about half of 5, since 30°F is only a couple of fine degrees below freezing or—as near as anybody could feel—a single coarse degree below 0°C. Minus one was the magic number that finally got us out of the chiller, only to have a much more practical example when we got to the freezer.

Physics students and interpreters are concerned with the freezing point of water, but packing plant personnel only care about the freezing point of meat—and to them anything above –10°F is too hot. The temperature inside the freezer was a crisp –20°F or (you guessed it!) about –29°C. Standing in that temperature gives the interpreter excellent incentive to memorize a few other equivalences from which to quickly extrapolate using that 9-to-5 ratio. Forty below zero is the same in both systems, so when you are shivering at –20°F, that's 20°F warmer than where the two curves meet (a little over two nines) so the corresponding Celsius temperature would be a little over two fives warmer, or just a tad warmer than –30 °C.

In the more comfortable ranges, once you have memorized 16°C as 61°F and 40°C as 102°F, you can work off those numbers both ways to convert temperatures without losing the rest of what the speaker is saying.

When standing next to liquid nitrogen or molten steel, it is a comfort to realize that the more extreme the temperature the less you have to worry about the 32°F scale difference in the freezing point of water between the two systems. For the temperature of a star's surface in degrees Celsius, for instance, you can safely double the number, then knock off about 10% of the result, but astronomy audiences tend to prefer their temperatures in degrees Celsius anyway. It is still a comfort to know that in this range, the arithmetic is not all that different from conversions between square feet and square meters. ★

Of Bottom-Feeders and Bleeding Edges

by Frank Dietz © 2002

EVERY FEW YEARS, your trusty old computer has to be replaced by a trusty new one. This is the right time to look at the state of technology, assess price-to-performance ratios and decide what you as a translator really need.

If you are not using a resource-hungry translation memory program such as Trados Freelance Edition or frequently work in desktop publishing programs such as FrameMaker, your computing needs are on the low end, and you can save money by buying a refurbished computer that represents last year's state of the art. Just make sure you receive a decent warranty, and spend the money you saved on a nice monitor and a really good office chair.

The average user should probably look at a computer equipped with one of the slower Pentium 4 or Athlon XP chips, Windows XP Home Edition (unless you have steady clients demanding use of a Mac, I would not recommend an Apple, as so many translation-relevant programs, such as CD-ROM dictionaries, are not available for it), 256 MB of RAM, a 40-GB hard drive and a CD-RW drive (nice for backups and exchange of large files). Get at least a 17-inch monitor and spend some time checking how it displays the type and size of text you will be staring at for hours every single day.

On the bleeding edge you can spend some serious money on the latest tech gizmos, but few features are really relevant for a translator's work. DVD drives let you access reference works on DVD, but there are relatively few software titles that use that medium so far (so everyone is using DVD drives to watch movies). If you need to test graphics-intensive software (in my case, computer games), a good video card is a must. Flat panel LCD monitors are great space-savers on your desk, but are still rather expensive. DVD-R drives that let you record DVDs are still too pricey.

If your "old" computer is still relatively new, you might consider networking it with the new one, particularly if that will allow you to share a broadband connection. There are situations when two systems can be useful, for instance while testing a translated program and writing up a bug report. Just don't allow your house to turn into a computer museum. Dusty IBM ATs and malfunctioning TSR-80s really serve no useful function anymore. ★