✓ No, sqrt() isn't what the Roman legions paraded on their standards. (That was SPQR, which stands for *Senatus Populus Que Romanus*, the Senate, and People of Rome.)



✓ A reader once wrote me e-mail asking whether the C language had some equivalent of the mathematical i dingus, used to represent the *imaginary number* $\sqrt{-1}$, or the square root of "negative one." Because I don't know everything, I had to say that I don't know. Some mathematical C language library somewhere may deal with i. But, as far as any other workaround is concerned, I have no idea — though I believe it can be worked into the C++ programming language. (But I don't do C++, so I can't confirm it.)

Strange Math? You Got It!

Most C language libraries are just bursting with math functions. Lots of them. I have listed some of the more common ones in Table 25-1, along with their formats. Pretty much all of them want a double or float value, which makes sense when you figure that if math had no decimals, more of us would enjoy it.

Table 25-1	Weirdo Math Functions You Never Use			
Function	What It Computes	Format	Include	Library
abs	Absolute value	a=abs(b)	STDLIB.H	standard
acos	Arc cosine	x=acos(y)	MATH.H	libm
asin	Arc sine	x=asin(y)	MATH.H	libm
atan	Arc tangent	x=atan(y)	MATH.H	libm
COS	Cosine	x=cos(y)	MATH.H	libm
exp	Exponential	x=exp(y)	MATH.H	libm
log	Natural logarithm	x=log(y)	MATH.H	libm
log10	Base 10 logarithm	x=log10(y)	MATH.H	libm
sin	Sine	x=sin(y)	MATH.H	libm
tan	Tangent	x=tan(y)	MATH.H	libm

- ✓ In Table 25-1, variables a, b, and c denote integer values. Variables x, y, and z are doubles.
- ✓ The libm library is needed only for compiling programs under a Unixlike operating system. Refer to the earlier sidebar "Gotta link in that math library!"