

Here's a handy table of rational approximations to various constants:

<u>Number</u>	<u>Approximation</u>	<u>Error</u>
$\pi = 3.141 \dots$	355 / 113	8.5×10^{-9}
$\sqrt{2} = 1.414 \dots$	19601 / 13860	1.5×10^{-9}
$\sqrt{3} = 1.732 \dots$	18817 / 10864	1.1×10^{-9}
$e = 2.718 \dots$	28667 / 10546	5.5×10^{-9}
$\sqrt{10} = 3.162 \dots$	22936 / 7253	5.7×10^{-9}
$\sqrt[12]{2} = 1.059 \dots$	26797 / 25293	1.0×10^{-9}
$\log_{10} 2 / 1.6384 = 0.183 \dots$	2040 / 11103	1.1×10^{-8}
$\ln 2 / 16.384 = 0.042 \dots$	485 / 11464	1.0×10^{-7}
$.001^\circ / 22\text{-bit rev} = 0.858 \dots$	18118 / 21109	1.4×10^{-9}
$\text{arc-sec} / 22\text{-bit rev} = 0.309 \dots$	9118 / 29509	1.0×10^{-9}
$c = 2.9979248$	24559 / 8192	1.6×10^{-9}