

ภาคผนวก จ

TRIGONOMETRIC E-FUNCTIONS

Function	Equivalent
Secant	$\text{SEC}(X)=1/\text{COS}(X)$
Cosecant	$\text{CSC}(X)=1/\text{SIN}(X)$
Cotangent	$\text{COT}(X)=1/\text{TAN}(X)$
Inverse Sine	$\text{ARCSIN}(X)=\text{ATN}(X/\text{SQR}(-X^2+1))$
inverse Cosine	$\text{ARCCOS}(X)=-\text{ATN}(X/\text{SQR}(-X^2+1))+1.5708$
Inverse Secant	$\text{ARCSEC}(X)=\text{ATN}(X/\text{SQR}(X^2-1))$ $+ \text{SGN}(\text{SGN}(X)-1)*1.5708$
Inverse Cosecant	$\text{ARCCSC}(X)=\text{ATN}(X/\text{SQR}(X^2-1))$ $+ (\text{SGN}(X)-1)*1.5708$
inverse Cotangent	$\text{ARCCOT}(X)=\text{ATN}(X)+1.5708$
Hyperbolic Sine	$\text{SINH}(X)=(\text{EXP}(X)-\text{EXP}(-X))/2$
Hyperbolic Cosine	$\text{COSH}(X)=(\text{EXP}(X)+\text{EXP}(-X))/2$
Hyperbolic Tangent	$\text{TANH}(X)=(\text{EXP}(X)-\text{EXP}(-X))/(\text{EXP}(X)$ $+ \text{EXP}(-X))$
Hyperbolic Secant	$\text{SECH}(X)=2/(\text{EXP}(X)+\text{EXP}(-X))$
Hyperbolic Cosecant	$\text{CSCH}(X)=2/(\text{EXP}(X)-\text{EXP}(-X))$
Hyperbolic Cotangent	$\text{COTH}(X)=(\text{EXP}(X)$ $+ \text{EXP}(-X))/(\text{EXP}(X)-\text{EXP}(-X))$
Inverse Hyperbolic Sine	$\text{ARCSINH}(X)=\text{LOG}(X+\text{SQR}(X^2+1))$
Inverse Hyperbolic Cosine	$\text{ARCCOSH}(X)=\text{LOG}(X+\text{SQR}(X^2-1))$

Function	Equivalent
inverse Hyperbolic Tangent	$\text{ARCTANH}(X)=\text{LOG}((1+X)/(1-X))/2$
Inverse Hyperbolic Secant	$\text{ARCSECH}(X)=\text{LOG}((\text{SQR}(-X*X+1)+1)/X)$
Inverse Hyperbolic Cosecant	$\text{ARCCSCH}(X)=\text{LOG}((\text{SGN}(X)*\text{SQR}(X*X+1)+1)/X)$
Inverse Hyperbolic Cotangent	$\text{ARCCOTH}(X)=\text{LOG}((X+1)/(X-1))/2$

คำสั่ง DEF FN สำหรับข้อมูลการลงรหัส (coding information) เพิ่มเติม