

Ellipt	Elliptical functions					
g-shift	$\theta \rightarrow m$	$m \rightarrow \theta$	$a, b \rightarrow m$	$\rightarrow \text{DEG}$	$\rightarrow \text{D.MS}$	$\rightarrow \text{RAD}$
f-shift	$k \rightarrow m$	$m \rightarrow k$	$\text{am}(u, m)$	$F(\phi, m)$	$E(\phi, m)$	$Z(\phi, m)$
unshifted	$\text{sn}(u, m)$	$\text{cn}(u, m)$	$\text{dn}(u, m)$	$K(m)$	$E(m)$	$\Pi(n, m)$
Page 1	F1	F2	F3	F4	F5	F6

Prev menu https://47calc.com/doc/C47/Menus/C47_Menu_ELEC_page_2.pdf

Next menu https://47calc.com/doc/C47/Menus/C47_Menu_Energy_page_1.pdf

Ref 1 https://47calc.com/doc/Application%20Notes/AN0023_C47_R47_WGR_JM_DE_Elliptic_Incl_An1.pdf

Level	Label	Type	FullName	Extended description	Category	Flag	Catalog	Default
Menu p1	Ellipt	MENU	Elliptical functions	Elliptical functions ; Ref : https://47calc.com/doc/Application%20Notes/AN0023_C47_R47_WGR_JM_DE_Elliptic_Incl_AnX1.pdf	Mathematics		ELLIPT	
F1	sn(u,m)	Function (dyadic)	Elliptic sine	Elliptic sine ; Parameter : u = X ; m = Y ; Info : u is Real number (1.0), not an Angle (1.1-1.5)	Mathematics		sn(u,m)	
F2	cn(u,m)	Function (dyadic)	Elliptic cosine	Elliptic cosine ; Parameter : u = X ; m = Y ; Info :	Mathematics		cn(u,m)	
F3	dn(u,m)	Function (dyadic)	Elliptic delta amplitude	Elliptic delta amplitude ; Parameter : u = X ; m = Y ; Info : u is a Real number (1.0), not an Angle (1.1-1.5)	Mathematics		dn(u,m)	
F4	K(m)	Function (monadic)	Complete elliptic integral (1st)	Complete elliptic integral of the 1st kind -- see https://mathworld.wolfram.com/CompleteEllipticIntegraloftheFirstKind.html ; Parameter : m = X	Mathematics		K(m)	
F5	E(m)	Function (monadic)	Complete elliptic integral (2nd)	Complete elliptic integral of the 2nd kind -- see https://mathworld.wolfram.com/CompleteEllipticIntegraloftheSecondKind.html ; Parameter : m = X	Mathematics		E(m)	
F6	Π(n,m)	Function (dyadic)	Complete elliptic integral (2nd)	Complete elliptic integral of the 3rd kind ; Parameter : n = X ; m = Y	Mathematics		Π(n,m)	
fF1	k→m	Function (monadic)	Eccentricity to modulus	Ellipse eccentricity to modulus : $m = k^2$; TI : modulus $m=k^2$:	Mathematics		k→m	
fF2	m→k	Function (monadic)	Modulus to eccentricity	Ellipse modulus to eccentricity : $k = \sqrt{m}$; TI : eccentricity $e=k=\sqrt{m}$:	Mathematics		m→k	
fF3	am(u,m)	Function (dyadic)	Elliptic amplitude	Elliptic amplitude ; Parameter : u = X ; m = Y ; Info : u is a Real number (1.0), not an Angle (1.1-1.5)	Mathematics		am(u,m)	
fF4	F(φ,m)	Function (dyadic)	Incomplete elliptic integral (1st)	Incomplete elliptic integral of the 1st kind ; Parameter : φ = X ; m = Y ; Info : φ is amplitude angle (any angle mode)	Mathematics		F(φ,m)	
fF5	E(φ,m)	Function (dyadic)	Incomplete elliptic integral (2nd)	Incomplete elliptic integral of the 2nd kind ; Parameter : φ = X ; m = Y ; Info : φ is amplitude angle (any angle mode)	Mathematics		E(φ,m)	
fF6	Z(φ,m)	Function (dyadic)	Jacobi's Zeta	Jacobi's Zeta ; Parameter : φ = X ; m = Y ; Info : φ is amplitude angle (any angle mode)	Mathematics		Z(φ,m)	
gF1	θ→m	Function (monadic)	Angle to modulus	Ellipse eccentricity angle to modulus : $m = \sin^2(\theta)$; TI : modulus $m=k^2$:	Mathematics		θ→m	
gF2	m→θ	Function (monadic)	Modulus to angle	Ellipse modulus to eccentricity angle : $\theta = \arcsin(\sqrt{m})$; TI : eccentricity angle θ :	Mathematics		m→θ	
gF3	a,b→m	Function (dyadic)	Dimensions to modulus	Ellipse dimensions to modulus : $m = 1-(a/b)^2$, where b is the larger axis ; TI : modulus $m=k^2$:	Mathematics		a,b→m	
gF4	→DEG	Function (monadic)	Set DEG tag or convert to DEG	If untagged, set tag to DEG (degrees) ; if tagged, convert X to DEG ; does not change Angular Display Mode ; Tag : °	Angle tagging or conversion		→DEG	
gF5	→D.MS	Function (monadic)	Set D.MS tag or convert to D.MS	If untagged, set tag to D.MS (sexagesimal degrees) ; if tagged, convert X to D.MS ; does not change Angular Display Mode ; Tag : °' "	Angle tagging or conversion		→D.MS	
gF6	→RAD	Function (monadic)	Set RAD tag or convert to RAD	If untagged, set tag to RAD (radians) ; if tagged, convert X to RAD ; does not change Angular Display Mode ; Tag : °	Angle tagging or conversion		→RAD	