

FIGURE 17.5. $\varphi - 90^\circ \frac{F(\varphi \setminus \alpha)}{K}$, α constant.

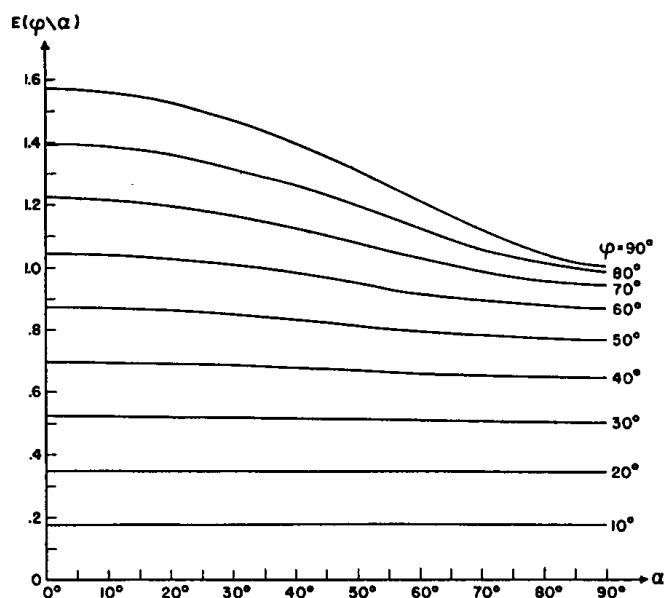


FIGURE 17.6. *Incomplete elliptic integral of the second kind.*

$E(\varphi \setminus \alpha)$, φ constant

Special Cases

17.4.19 $F(\varphi \setminus 0) = \varphi$

17.4.20 $F(i\varphi \setminus 0) = i\varphi$

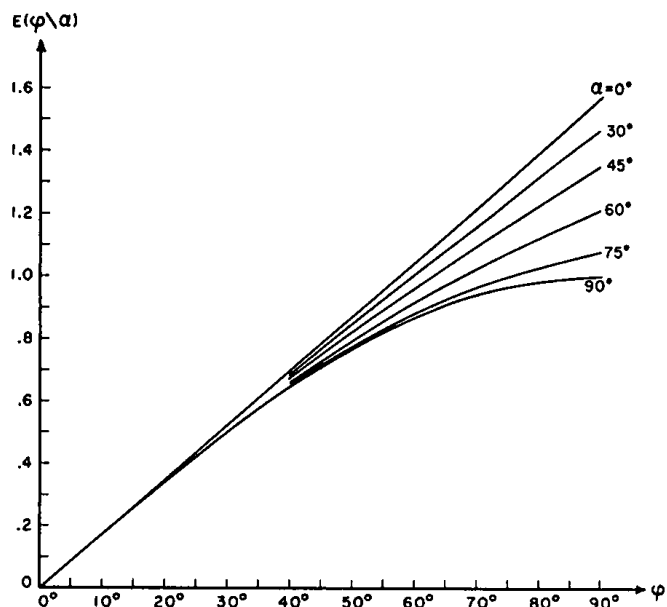


FIGURE 17.7. *Incomplete elliptic integral of the second kind.*

$E(\varphi \setminus \alpha)$, α constant

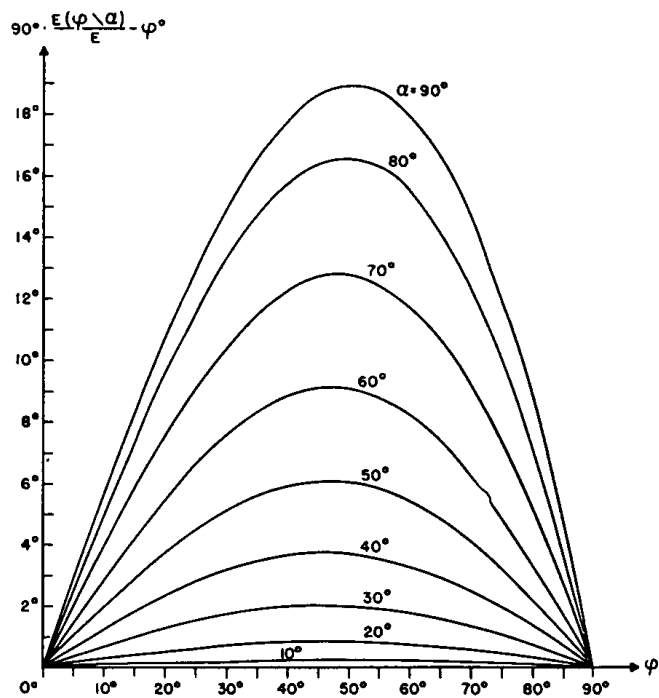


FIGURE 17.8. $90^\circ \frac{E(\varphi \setminus \alpha)}{E} - \varphi$, α constant.

17.4.21

$$F(\varphi \setminus 90^\circ) = \ln(\sec \varphi + \tan \varphi) = \ln \tan \left(\frac{\pi}{4} + \frac{\varphi}{2} \right)$$

17.4.22 $F(i\varphi \setminus 90^\circ) = i \arctan(\sinh \varphi)$

17.4.23 $E(\varphi \setminus 0) = \varphi$

17.4.24 $E(i\varphi \setminus 0) = i\varphi$

17.4.25 $E(\varphi \setminus 90^\circ) = \sin \varphi$

17.4.26 $E(i\varphi \setminus 90^\circ) = i \sinh \varphi$