Weierstrass Product for the Gamma Function

LaTeX is good for typesetting math. LaTeX handles the numbering for the *enumerate* list environment automatically. LaTeX manages cross references automatically. The following formula may be found in Whittaker & Watson [4].

$$\int_0^\infty t^x e^{-t} \frac{dt}{t} \quad = \quad \frac{1}{x} \prod_{k=1}^\infty \frac{\left(1 + \frac{1}{k}\right)^x}{\left(1 + \frac{x}{k}\right)}$$

References

[1] Lars V. Ahlfors, *Complex Analysis*, 3rd edition, McGraw Hill, 1979.

[2] Leslie Lamport, *LaTeX: a Document Preparation System*, 2nd edition, Addison-Wesley, 1994.

[3] Frank Mittelbach et al., *The LaTeX Companion*, 2nd edition, Addison-Wesley, 2004.

[4] E. T. Whittaker & G. N. Watson, *A Course of Modern Analysis*, 4th edition, Cambridge University Press, 1969.