= xy defined on D =
{ (x , y) ? R2 : x > 0 } . Then D can be viewed as a subset of R2 (that is , the set of all pairs (x , y) with x , y belonging to the extended real number line R
= [? ? , + ?] , endowed with the product topology) , which will contain the points at which the function f has a limit .

In fact , f has a limit at all accumulation points of D , except for (0 , 0) , (+ ? , 0) , (1 , + ?) and (1 , ? ?) . Accordingly , this allows one to define the powers xy by continuity whenever 0 ? x ? + ? , ? ? ? y ? + ? , except for 00 , (+ ?) 0 , 1 + ? and 1 ? ? , which remain indeterminate forms .

Under this definition by continuity , we obtain :

x + ? =