

$= 1$  for all  $n$  if  $b = 1$

If the number  $b$  varies tending to 1 as the exponent tends to infinity then the limit is not necessarily one of those above . A particularly important case is

$(1 + 1/n)^n \rightarrow e$  as  $n \rightarrow \infty$

See § The exponential function below .

Other limits , in particular of those that take on an indeterminate form , are described in § Limits of powers below .

$=$  Rational exponents  $=$