

fcn Values on Calculator.

① TRACE considers domain to be the X window

② home screen  $Y_1(\#)$  will work if  $\#$  is in the actual domain of the function.

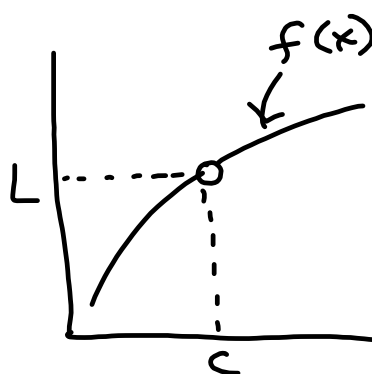
Properties of Limits.

1. Limit of sum = sum of limits.

formally:

$$\lim_{x \rightarrow c} (f(x) + g(x)) = \lim_{x \rightarrow c} f(x) + \lim_{x \rightarrow c} g(x)$$

2. Limit of difference = difference of limits



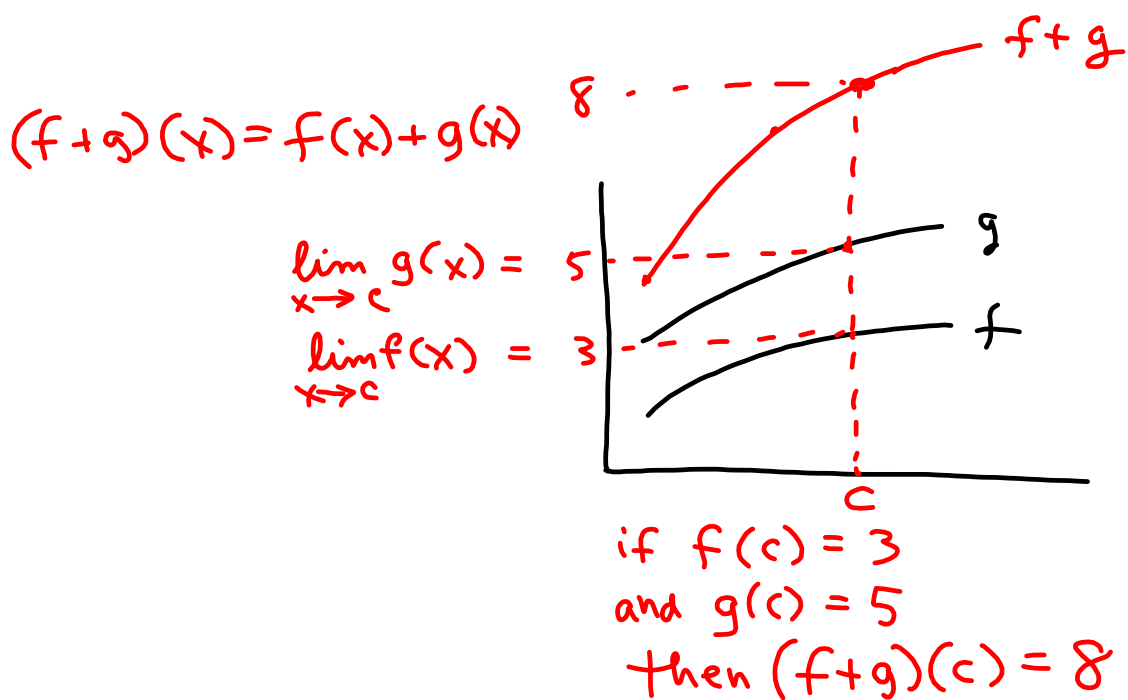
$$\lim_{x \rightarrow c} f(x) = L$$

Limit of product = product of limits.

Limit of constant  $\times$  fcn  
= constant  $\times$  limit

Quotient - - -

Power - - -



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$$\lim_{x \rightarrow 1} \frac{x^2 - 1}{x - 1} = 2$$

Theorem 2: with polynomials  
and rational fcn's, can  
find limit by substitution  
of  $c$  for  $x$ .

provided  $c$  does not make  
denominator of rational fcn  
= zero.