

## Finding Limits Steps

1. Input the x-value and calculate a y-value.
2. Use the quotient theorem for limits.
  - If the  $\lim F(x)$  and  $\lim G(x)$  both exist and  $\lim G(x)$  doesn't =0
3. Factor, if possible, the numerator, and or denominator, and cancel out.
4. If a radical expression exists, multiply by the conjugate of the radical.
5. If  $\lim F(x)$  doesn't =0 and  $\lim G(x)=0$ 
  - Lim does not exist
  - Lim=infinity
  - Lim=negative infinity
6. If  $X \rightarrow$  infinity or negative infinity, divide the numerator by the highest power of X.
7. Guess by making a table and/or graphing functions.