

$$f(x, a, b)$$

 $a_2$  $a_1$  $x$ 

$$\frac{x}{1+(x)^2}$$


The graph illustrates the function  $f(x, a, b)$  and its linear approximations. The y-axis is labeled with  $a_1$  and  $a_2$ , and the x-axis is labeled with  $x$ . The function is represented by a blue curve that starts at the origin, reaches a peak, and then decays. Two solid red lines represent linear approximations (tangents) to the curve at different points. Two dashed red lines represent secant lines. The formula  $\frac{x}{1+(x)^2}$  is shown on the right side of the graph.