

§2.6 (PART 2): THE DERIVATIVE FUNCTION

1.] Use the limit definition to find the derivative function of $f(x) = x^3 + x$.

2.] Use the limit definition to find the derivative function of $f(x) = \sqrt{x}$ and use it to compute the equations of the tangent line to the graph of f at the points $(1, f(1))$ and $(2, f(2))$.

3.] Use the limit definition to find the derivative function of $f(x) = \sqrt{x^2 + 1}$.