Present neatly ~~on separate paper~~. Justify for full credit. No Calculators.

Name _____ Score _____ ~10 minutes

1. Consider the function $f(x)=\frac{9}{\sqrt{x}}$. Use the definition of slope to determine the equation of the tangent line at the point on the curve where $x=9.$ [8 points]

2. Writing: Briefly discuss how the tangent line to the graph of a function $y=f(x)$ at a point $P\left(x_0, f(x_0)\right)$ is defined in terms of secant lines to the graph through point P. [2 points]