

The background features a light gray gradient with several realistic water droplets of various sizes scattered across the frame. A faint, large circular pattern, possibly a watermark or a decorative element, is visible in the upper center.

LESSON 2.1

RATE OF CHANGE

PROBLEM

Find the equation of the
line tangent to the function

$f(x) = x^2$ at the point $(-1, 1)$.

PROBLEM

Find the derivative of $f(x) = \sqrt{x}$. Use proper notation throughout. What is $f'(4)$? $f'(0)$?

Explain.