

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Use the **limit definition of the derivative** to find an equation for the tangent line to the graph of $f(x) = \frac{1}{(x+3)^2}$ at $x = -1$.

2. Use the **basic derivation rules** to find an equation for the tangent line to the graph of $f(x) = x^5 - 3x^3 + x$ at $x = 2$. (The computations may appear difficult but they are not; carry them out carefully!!)