

## QUIZ 3 - MATH 151

Friday, February 4

YOUR NAME: \_\_\_\_\_

George Voutsadakis

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. Compute the limit  $\lim_{x \rightarrow +\infty} (\sqrt{x^3 - 5} - x^2)$

2. Compute the limit  $\lim_{x \rightarrow 5^-} \frac{x^2 - 25}{(x - 5)^2}$

3. Find an equation for the tangent line to the graph of  $f(x) = \frac{1}{x+2}$  at  $x = 3$ .