

# QUIZ 1 - MATH 151

Friday, September 2

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. Find the domain of the function  $f(x) = \frac{1}{\sqrt{7x+21}}$ .

2. Sketch (carefully, please) the graph of the function

$$f(x) = \begin{cases} x^3, & \text{if } x \leq -1 \\ -x, & \text{if } -1 < x \leq 1 \\ \frac{1}{x}, & \text{if } x > 1 \end{cases} .$$