

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  $f(x) = \frac{1}{x^3+x^2-20x}$ .

2. Sketch the graph of the function  $f(x) = 3^{-x}$ .

3. Sketch the graph of the function  $f(x) = \cos\left(x - \frac{\pi}{2}\right) + 1$ .