

Panel 4

Quiz #6

Name: \_\_\_\_\_

① Find all relative extrema of  $f(x) = x^3 + 3x^2 - 9x + 3$ ② Find all inflection points of  $f(x) = 2x^3 + 6x^2 - 9$ 

Panel 5

③ Sketch  $f(x) = \frac{x^2}{x^2 - 1}$  Use  $f'(x) = -\frac{2x}{(x^2 - 1)^2}$ ,  $f''(x) = \frac{2(3x^2 + 1)}{(x^2 - 1)^3}$