

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

1. (10 points) Find the global extrema of the function  $f(x) = 3x + \frac{75}{x} + 10$  on  $(0, \infty)$ .

2. (10 points) Find the global extrema of the function  $f(x) = x^2 - 4x + 7$  on  $[0, 3]$

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

QUIZ 17 ♣

MATH 200  
November 7, 2022

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1. (10 points) Find the global extrema of the function  $f(x) = 2x + \frac{8}{x^2}$  on  $(0, \infty)$ .

2. (10 points) Find the global extrema of the function  $f(x) = x^3 - 3x$  on  $[0, 2]$ .

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

QUIZ 17  $\diamond$

MATH 200  
November 7, 2022

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1. (10 points) Find the global extrema of the function  $f(x) = 100 + 300x - x^3$  on  $(0, \infty)$ .

2. (10 points) Find the global extrema of the function  $f(x) = \cos(x) \sin(x)$  on  $[0, \pi]$ .

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

1. (10 points) Find the global extrema of the function  $f(x) = x^3 - 75x + 10$  on  $(0, \infty)$ .

2. (10 points) Find the global extrema of the function  $f(x) = \sqrt[3]{x^4} + 4\sqrt[3]{x}$  on  $[-8, 8]$ .