

Name: _____

This quiz concerns the function $f(x) = 3x + \frac{75}{x} + 10$.

1. (10 points) Use the second derivative test to find the local extrema of $f(x)$.

2. (5 points) Find the interval(s) on which $f(x)$ is concave up.

3. (5 points) Find the interval(s) on which $f(x)$ is concave down.

Name: _____

This quiz concerns the function $f(x) = 2x + \frac{8}{x^2}$.

1. (10 points) Use the second derivative test to find the local extrema of $f(x)$.

2. (5 points) Find the interval(s) on which $f(x)$ is concave up.

3. (5 points) Find the interval(s) on which $f(x)$ is concave down.

Name: _____

QUIZ 16 \diamond

MATH 200
November 2, 2022

This quiz concerns the function $f(x) = 100 + 300x - x^3$.

1. (10 points) Use the second derivative test to find the local extrema of $f(x)$.

2. (5 points) Find the interval(s) on which $f(x)$ is concave up.

3. (5 points) Find the interval(s) on which $f(x)$ is concave down.

Name: _____

QUIZ 16 ♠

MATH 200
November 2, 2022

This quiz concerns the function $f(x) = x^3 - 75x + 10$.

1. (10 points) Use the second derivative test to find the local extrema of $f(x)$.

2. (5 points) Find the interval(s) on which $f(x)$ is concave up.

3. (5 points) Find the interval(s) on which $f(x)$ is concave down.