
Name: _____

QUIZ 16 

MATH 200
October 21, 2025

1. This problem concerns the function $f(x) = x^2 e^{-x}$.

(a) $f'(x) =$

(b) Find the critical points of f

(c) $f''(x) =$

(d) Use the second derivative test to identify the local extrema of f .

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MATH 200
October 21, 2025

1. This problem concerns the function $f(x) = 4 - x^2e^x$.

(a) $f'(x) =$

(b) Find the critical points of f

(c) $f''(x) =$

(d) Use the second derivative test to identify the local extrema of f .