Calculus III Exercises

Introduction to Differential Equations

Infinite Series

Parametric Equations, Polar Coordinates, and Conic Sections

9.1 Edfinity

Question 1.4

- Match each differential equation to a function which is a solution.

A. $y = 3x + x^2$

B. $y = e^{-5x}$

C. $y = \sin(x)$

D. $y = x^{\frac{1}{2}}$

E. $y = \exp(6x)$

1. $2x^2 y'' + 3xy' = y$

2. $y'' + 7y' + 10y = 0$

3. $xy' - y = x^2$

4. $y'' + y = 0$

- Approach:

9.1 Rogawski

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Infinite Series

Parametric Equations, Polar Coordinates, and Conic Sections