

# Math 170: Quiz 10 Solution

Sayan Mukherjee's discussion

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**Problem 1.** Compute the following derivative:

$$\left( \frac{x^3 - 2x^2 + 1}{x^2 + 5x + 3} \right)'$$

*Solution.*

$$\left( \frac{x^3 - 2x^2 + 1}{x^2 + 5x + 3} \right)' = \frac{(3x^2 - 4x)(x^2 + 5x + 3) - (x^3 - 2x^2 + 1)(2x + 5)}{(x^2 + 5x + 3)^2}.$$

□

*Rubric.*

- Left to the grader's discretion