

Math 2143 - Brief Calculus with Applications

Discussion Board Week 2 - Due 2018.06.17

Compute the second derivatives of the following functions.

1. $f(x) = \frac{3x}{2x^2 - 1}$

2. $f(x) = \frac{2x^2 - 1}{3x}$

3. $f(x) = \sqrt[3]{5x^2 - x + 1}$

4. $f(x) = \sqrt[4]{2x + \frac{1}{x}}$

5. $f(x) = (3x^2 - 2x + 1)^3$

6. $f(x) = (3x^3 - 2x + 1)^2$

7. $f(x) = \frac{3x}{1 + \frac{1}{x}}$

8. $f(x) = \frac{1}{x + \sqrt{x}}$

9. $f(x) = \sqrt[4]{1 + \sqrt{2x}}$

10. $f(x) = \left(x + \frac{1}{2x}\right)^3$

11. $f(x) = \left(3x - \frac{1}{5x}\right)^2$