

RIDDLE
CALCULUS
DERIVATIVES REVIEW

NAME _____

Use any method you wish to find $f'(x)$ for the following:

1. $f(x) = 2x^4 - 5x^3 + x^2 - 4x + 1$

2. $f(x) = 6\sqrt[3]{x^2} - \frac{4}{\sqrt{x}}$

3. $f(x) = (x^3 + 1)(2x^2 + 8x - 5)$

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

5. $f(x) = \frac{3x^2 - x + 2}{4x^2 + 5}$

6. $f(x) = \frac{1}{3x^2 - 5x + 4}$

7. $f(x) = (x^5 - 4x + 8)^7$

8. $f(x) = \frac{1}{(4x^2 + 6x - 7)^3}$

9. $f(x) = \sqrt[3]{5x^2 - x + 4}$

10. $f(x) = (2x + 5)^3(3x - 1)^4$

11. $f(x) = x^2 + 2\tan x$

12. $f(x) = \sin^3(5x^2)$

13. $f(x) = \tan \frac{1}{x}$

14. $f(x) = (x \sin x)^3$

15. $f(x) = (\sin x)(\sec x)$