

Math 151**Quiz 4**

Show all work in a neat and organized fashion. Clearly indicate your answers.
10 points possible.

No calculators on this quiz.

1. (2 pts.) Use the table below to evaluate $(f \circ g)(1)$.

x	1	2	3	4	5	6
$f(x)$	3	1	4	2	2	5
$g(x)$	6	3	2	1	2	3

2. (3 pts.) Differentiate $f(x) = (x^5 + x^4 + x^3 + x^2)(1 + x + x^2 + x^3)$. Do not simplify your answer.

3. (3 pts.) Differentiate $f(x) = \frac{x^5 + x^4 + x^3 + x^2}{1 + x + x^2 + x^3}$. Do not simplify your answer.

4. (2 pts.) Here is a graph of $y = f(x)$.

(Insert graph here.)

Which of the following is the graph of $y = f'(x)$?

(Insert 4 graphs here.)