Math 152 **Calculation Exam D-05**

Name: _____ Score: _____

Instructions: There are 10 functions on this exam. Compute their derivatives using our derivative rules. You must completely correctly calculate at least 8 of the 10 derivatives in order to pass. You may not use a calculator, and you do not need to simplify!

1. $y = \sin(x)$

2. $f(z) = (z^2 + z^3)^4$

3. $g(y) = \ln(\sec(y))$

4. $h(x) = x^2 \cos(x)$

5. $k(z) = \dfrac{z^4 - 1}{z^4 + 1}$

6. $y = \dfrac{x^2 - x + 2}{\sqrt{x}}$

7. $p(t) = \sin^2(t)$

8. $s(y) = \cot(3y^2 + 5)$

9. $r(z) = \dfrac{e^{1/z}}{5}$

10. $y(x) = \ln(\ln(\ln x))$