

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. $f(x) = 17x + 5$

2. $g(y) = 2 \sin(y) + \tan(y)$

3. $h(x) = (1 + \sqrt{x+1})^{10}$

4. $k(w) = \frac{4w^2}{2w}$

5. $p(t) = 10 \cot(8t)$

$$6. F(x) = xe^{-x}$$

$$7. G(y) = (e + e^2)^y$$

$$8. H(z) = \ln(\cos^2(z))$$

$$9. K(w) = \frac{1}{w^3 + 4w^2 - 6w + 11}$$

$$10. P(t) = \arcsin\left(\frac{3}{t}\right)$$