

## 2.8/2.9 Handout

1. Find the derivative of  $f(t) = (1 + 3t)^{30}$ .

2. Find the derivative of  $F(x) = \frac{1}{(7x + 1)^4}$

3. Find the derivative of  $G(x) = \sqrt{1 - x^2}$ .

4. Compute  $f'(x)$  for  $f(x) = e^{-x}$ .

5. Compute  $g'(x)$  for  $g(t) = e^{-t^2}$ .

6. Compute  $h'(x)$  for  $h(x) = x^2 e^x$ .