

WRITE YOUR NAME:

MAC 2241 Homework 5

Due in class, Friday March 31st

You can use more paper if necessary, but please STAPLE

Question 1. If $f(x) = (x - 2)(2x + 3)$, find $f'(x)$.

Question 2. If $f(x) = \frac{e^x}{1+x}$, find $f'(x)$.

Question 3. If $f(x) = \frac{1 + \sin x}{x + \cos x}$, find $f'(x)$.

Question 4. If $f(x) = (1 + 4x)^{1/3}$, find $f'(x)$.

Question 5. If $f(x) = (4x - x^2)^{100}$, find $f'(x)$.

Question 6. If $f(x) = \cos(8 + x^3)$, find $f'(x)$.

Question 7. If $f(x) = x^3 - 3^x$, find $f'(x)$.

Question 8. If $f(x) = \left(\frac{x^2 + 1}{x^2 - 1}\right)^3$, find $f'(x)$.