

In-Class Assignment 10

MATH 141

Directions: Work neatly on a separate sheet of paper. Your group will hand in one write-up with everyone's name on it. **DO NOT** fold the corner over to hold everything together!

Work together on each problem; do not delegate different problems to different people.

1. For each function f , find an antiderivative F .

(a) $f(x) = x^4, f(x) = x^5, f(x) = x^6, f(x) = x^n.$

(b) $f(x) = x^{-1}$

(c) $f(x) = 4x^2 - 6x$

(d) $f(x) = e^x$

(e) $f(x) = \sin x, f(x) = \cos x$

(f) $f(x) = \frac{1}{1+x^2}$

(g) $f(x) = 6e^x + 8x^5 - \cos x$