

# INTRODUCTION TO CALCULUS

MATH 1A

UNIT 30: WORKSHEET

## Partial Fractions

**Problem 1:** Integrate  $\frac{1}{1+x}$ .

**Problem 2:** Integrate  $\frac{9}{(x-1)^2}$ .

**Problem 3:** Integrate  $\frac{7}{x^2+1}$ .

**Problem 4:** Integrate  $\frac{1}{(x+1)(x-1)(x+2)}$ .

**Problem 5:** Integrate  $\frac{1}{1-x^4}$ .

**Problem 6:** Simplify  $\frac{1}{3+2/x} + \frac{1}{x}$  then integrate it.