

NAME: _____ (please print clearly)
(Last, First)

1. Find the most general antiderivative of the following (a) $3x^2 + 5x$

(b) $\frac{3}{5} + \sqrt{x} + 2\frac{1}{x}$

2. Find the following indefinite integrals. (a) $\int \cos 3x \, dx$

(b) $\int 3 \cos x + \frac{2}{x} \, dx$

(c) $\int \frac{5 - x^3}{x^2} \, dx$

3. Evaluate the definite integral $\int_1^2 2x + 6x^2 + 3 \, dx$. Show clearly the steps you use, not just the number.