

MATH 211: 8-30 WORKSHEET

- (1) Compute the following definite and indefinite integrals. Remember, a definite integral evaluates to a number while an indefinite integral evaluates to a function, with a “+C” parameter.

$$\int_0^3 x^2 - x \, dx$$

$$\int 3 \cos x \, dx$$

$$\int_{-\pi/2}^{\pi/2} 3 \cos x \, dx$$

$$\int e^x \, dx$$

- (2) Compute the indefinite integral

$$\int x e^{x^2} \, dx.$$

- (3) Compute the definite integral

$$\int_0^{\pi/2} \cos x \sqrt{1 + \sin x} \, dx.$$