## Problem 1

Find 
$$\int_0^1 2x \ dx$$

## Problem 2

Find 
$$\int_0^{\pi/2} \cos(x) \ dx$$

## Problem 3

Find 
$$\int_{-2}^{0} 4 - x^2 dx$$

## Problem 4

Find 
$$\int_{-1}^{1} 4x + 4x^3 dx$$

# Problem 5

Find 
$$\int_1^2 x(x^3+x^2) dx$$
 (you don't need to simplify).

## Problem 6

Find 
$$\int_1^2 \frac{x^3 + x^2}{x} dx$$
 (you don't need to simplify).