

# Calculus II

## Quiz Questions

October 3, 2025

Please write your name on the top of the paper.

i) Evaluate:

$$\int_0^2 \frac{3x}{2} dx$$

ii) Find the integral of  $g(x)2x - 2$  from  $-1$  to  $4$ .

iii) Let:

$$h(x) = \begin{cases} -2 & \text{if } x \leq 0 \\ \sqrt{16 - x^2} & \text{if } x \geq 0 \end{cases}$$

Find the integral of  $h(x)$  from  $-2$  to  $4$ .

iv) Evaluate:

$$\int_{-3}^3 \sqrt{9 - x^2} + 6 dx$$

v) Evaluate:

$$\int_{-3}^3 \sqrt{9 - x^2} - 5 dx$$

vi) Find the integral of  $l(x) = -3x - 2$  from  $0$  to  $5$ .