Name: Student ID:

You may use books and notes. No calculators. In order to score points you should show *all* your working on this quiz. There are a total of 5 points available.

1. (5 points) (a) (4 points) What is

$$\int \frac{x}{x-2} \mathrm{d}x?$$

(hint: use the substitution u = x - 2)

(b) (1 point) Evaluate

$$\int_{3}^{4} \frac{x}{x-2} \mathrm{d}x$$