

Date: _____
Start: _____
End: _____
Grader: _____

Math 31
Integral Gateway Test

Name: _____
ID #: _____
Section: _____
Instructor: _____

Find each of the indicated integrals. You need 6 out of 7 correct to pass (no partial credit). *Be careful when writing answers, since the graders have firm instructions to mark off for all errors, including missing parentheses! No calculators allowed.*

Time Limit: 20 minutes.

- $\int (5x^3 + 6x - 5) dx$

- $\int (\cos 7z)(1 + \sin 7z) dz$

- $\int ze^{-5z} dz$

THIS TEST IS CONTINUED ON THE BACK

- $\int \frac{e^{(1/y^6)}}{y^7} dy$

- $\int \frac{(1 + 3\sqrt{x})^4}{\sqrt{x}} dx$

- $\int \frac{5 + 2 \ln t}{t} dt$

- $\int \frac{5t}{4 - 3t^2} dt$