# Quiz 4

Math 102, Term 172

NAME:
ID:

**Problem 1.** Find $\int \frac{x^2+6}{x^3-2x-4}\,dx$.

**Problem 2.** Find the arc length of $y = \cosh x$, for $0 \leq x \leq \ln 2$.

BONUS QUESTIONS:

**Problem 1.** Find the volume of the solid obtained by rotating the region under $y = x \csc^2 x \cot x$, $\frac{\pi}{3} \leq x \leq \frac{\pi}{2}$ around the y-axis.

**Problem 2.** Find $\int \tan^2 x \, . \sec x dx$.