Student ID:

Student Name:

Serial Number:

Math 102, Section 16
Summer 2017, Term 162

Quiz 2
Version A

**Instructions:** Show Your Work!

**1.** (5 pts) Find the area of the region bounded by the curves $y = \ln x, \quad x + y - 1 = 0$, and $y = 1$.

**2.** (5 pts) The base of a solid is bounded by the curves $y = x^3, y = 0$ and $x = 1$. If the cross-sections of the solid perpendicular to the x-axis are squares, find the volume of the solid.

Student ID:

Student Name:

Serial Number:

Math 102, Section 38
Summer 2017, Term 162
**Instructions:** Show Your Work!

Quiz 2
Version B

**1.** (5 pts) Find the area of the region enclosed by the graphs of the functions $y = x^3 - x$ and $y = 3x$.

**2.** (5 pts) Find volume of the solid obtained when the region bounded by $y = e^x, y = \frac{1}{1+x}, x = 0$ and $x = 1$ is rotated about x-axis.