Handout 2

MATH 172 Lab: Sections 7 and 8

Lab Instructor (TA): Mohammed Kaabar

Student's Name:--

Student's ID:--------------------------

Note: This handout covers only the volumes by slicing and shells.

Instruction: Work in groups to solve the following mathematical problems, and I want from each group one person to volunteer as a representative to present the solution of (one problem)/(one part of problem) on our class board. DON'T AFRAID TO MAKE MISTAKES BECAUSE WE LEARN FROM OUR MISTAKES!

Question 1: Let R be a region bounded by $y = x^2$, and $y = 3x$ as shown in the figure below:
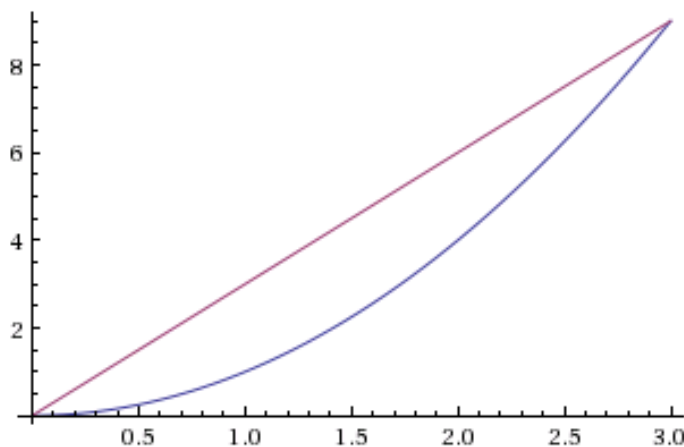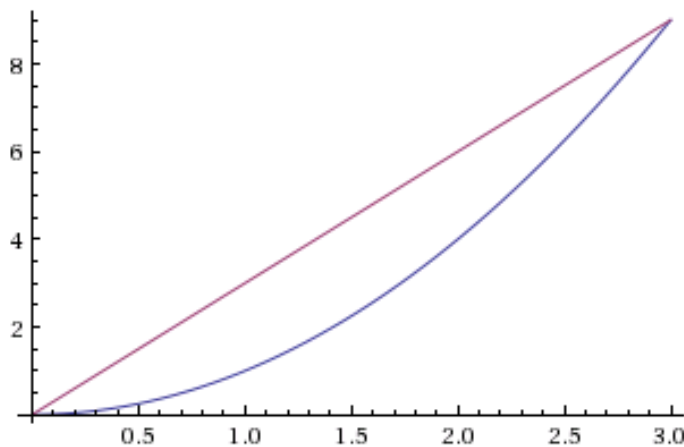

Find the volume of the above region generated by revolving R about the $x - axis$.

Question 2: Let R be a region bounded by $y = x^2$, and $y = 3x$ as shown in the figure below:
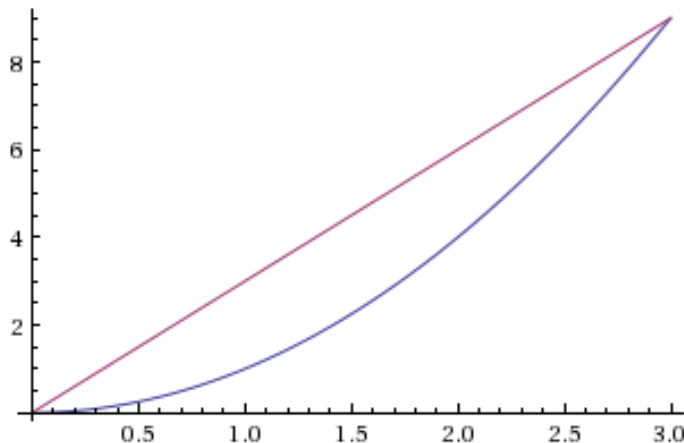
SET UP ONLY (DO NOT EVALUATE) an integral that represents the volume of the above region generated by revolving R about $y - axis$.

Question 3: Let R be a region bounded by $y = x^2$, and $y = 3x$ as shown in the figure below:

SET UP ONLY (DO NOT EVALUATE) an integral that represents the volume of the above region generated by revolving R about $x = -1$.