

King Fahd University of Petroleum and Minerals  
Department of Mathematical Sciences  
**Math 102.10 Quiz IV Fall (051)**

ID #: \_\_\_\_\_ NAME: \_\_\_\_\_

Serial # \_\_\_\_\_ Section #: \_\_\_\_\_

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1. Find the area bounded by the two curves  $y = x^2 + 3x + 5$  and  $y = -x^2 + 5x + 9$ .

2. The area bounded by the curves  $y = x^2 + 2$  and the line  $y = x + 8$  is rotated about the  $x$ -axis. Find the volume of the solid generated.