

Name: \_\_\_\_\_

11. Find the area between the curves  $y = x^2$  and  $y = 4$ .
- A.  $\frac{32}{3}$
  - B.  $\frac{25}{4}$
  - C. 7
  - D. None of these.
12. What integral is produced by the washer method for the volume of the solid of revolution obtained by rotating the region bounded by  $y = x^2$  and  $y = 4$  around the  $x$ -axis?
- A.  $\pi \int_{-2}^2 [(4)^2 - (x^2)^2] dx$
  - B.  $\pi \int_0^2 (x^2 - 4)^2 dx$
  - C.  $\int_{-1}^1 2\sqrt{\pi} - y\sqrt{\pi} dy$
  - D. None of these.
13. What integral is produced by the washer method for the volume of the solid of revolution obtained by rotating the triangle with vertices  $(1, 1)$ ,  $(2, 1)$ ,  $(2, 0)$  around the axis  $x=3$ ?
- A.  $\pi \int_0^1 [(1 + y)^2 - (1)^2] dy$
  - B.  $\int_1^2 [\pi(2 - y)^2 - (3)^2] dy$
  - C.  $\pi \int_1^3 [(2)^2 - (2 + x)^2] dx$
  - D. None of these.