

Q1. Find the volume of the solid generated by rotating the region enclosed by  $(x = \sqrt{y}, y = 0, \text{ and } x = 2)$  about  $x = 0$

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Q2. **Set up - Don't Integrate** - the integration that represents the the area of the surface generated by rotating  $y = x^3, 1 \leq x \leq 2$ , about  $y = -2$

Q1. Find the volume of the solid generated by rotating the region enclosed by  $(x = y - y^2, \text{ and } x = 0)$  about  $y = -1$

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Q2. **Set up - Don't Integrate** - the integration that represents the area of the surface generated by rotating

$x = \tan y, \frac{-\pi}{3} \leq y \leq 0$ , about the  $x$ -axis

Q1. Find the volume of the solid generated by rotating the region enclosed by

$(y = x^2 + 1, x\text{-axis}, x = 1 \text{ and } x = 0)$  about  $x = 1$

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Q2. Set up - Don't Integrate - the integration that represents the length of the curve  $x = \int_1^y \sqrt{t^2 - 1} dt, 1 \leq y \leq 4$