Name:

Teacher: _____ Date: _____ Volume of revolution 3

| 1. | Rotate the region bounded by $y = 2x + 1$; | 2. | Rotate the region bounded by $x = y^2 - 4$; |
|----|--|----|---|
| | y = 3 and the $x = 4$ about the line $y = 10$. | | x = 6 - 3y about the line $y = -8$. |
| 3. | Rotate the region bounded by $y = x^2 - 6x + 9$; | 4. | Rotate the region bounded by $y = x^2$; |
| | and $y = -x^2 + 6x - 1$ about the line $x = 8$. | | y = 0; x = 1; x = 2 about the line $x = 1$. |
| 5. | Rotate the region bounded by $y = x^2$; | 6. | Rotate the region bounded by $y = \sqrt{x - 1}$; $y =$ |
| | y = 0; x = 1; x = 2 about the line $x = 4$. | | 0; $x = 5$; about the line $y = 3$ |
| 7. | Rotate the region bounded by $y = \frac{e^{0.5x}}{x+2}$; | | |
| | $y = 5 - \frac{x}{4}$; $x = -1$ and $x = 6$ about the line $x = -2$ | | |

