Graph the region and set up the integral and evaluate. The indicated numbers are problems from the final exam review guide.

1. The area bounded by the curves $y = x^2$, $y = x^4$ and to the right of the $y$-axis. num60

2. The area bounded by the curves $y = 2 - x$ and $y = x^2$. num61

3. The area bounded by the curves $y = x^4$ and $y = 8x$. num62

4. Find the volume of the solid generated by revolving about the $x$-axis the region bounded by the curves $y = x^{3/2}$, $x = 4$ and the $x$-axis. num63

5. Find the volume of the solid generated by revolving about the $x$-axis the region bounded by the curves $y^2 = 4x^4$, $y = x^2$. num64

6. The volume of the region bounded by the graphs of $y = x^2$, $y = 4$, and the $y$-axis revolved about.
   
   (a) the $y$-axis
   
   (b) $y = 4$

   num65

7. The volume of the solid generated by revolving about the $y$-axis the region bounded by the graphs of $y = x + 4/x$, $x = 3$, $x = 1$ and the $x$-axis. num66

8. Find the area bounded by the curves $y = x^2 + 1$ and $y = 2x + 1$.

9. The volume of the solid generated by revolving about the $x$-axis the region bounded by the graphs of $y = x^3$, $x = 2$, and the $x$-axis.

10. The volume of the solid generated by revolving about the $x$-axis the region bounded by the graphs of $y = x^4$, $x = 2$, and the $x$-axis.