Sketch, set up the integral, and find the volume of the solid swept when the region is revolved about:

1.   Bounded by $y = \sqrt{x}$, $y = 0$, and $x = 9$.
a. x-axis (disc)   b. x-axis (shell)

c. y-axis (disc)   d. y-axis (shell)

2.   In the first quadrant and bounded by $y = x^3$, $x = 0$, and $y = 8$.
a. x-axis (disc)   b. x-axis (shell)

c. y-axis (disc)   d. y-axis (shell)

3. Find the volume of the solid generated by rotating $y = x^2$ and $y = x$ about the y-axis.
    (0.5235987756)
    Disc   Shell

4. Find the volume of the solid generated by rotating $y = x^2$, $y = 0$, and $x = 2$ about the x-axis.
   (20.106193)
   Disc   Shell

5. Find the volume of the solid formed by revolving the region bounded by
   $y = -x^2 + x$ and the $x - axis$ about the x-axis. (any method)(0.1047197551)

6. Find the volume of the solid formed by revolving the region bounded by the graph of
   $y = 2x - x^2$ and the $x - axis$ about the y-axis (any method). (8.37758041)

7. Find the volume of the solid formed by revolving the region bounded by $y = x^2$ and the $y = \sqrt{x}$
   about the y-axis. (0.9424777961)
   Disc   Shell

8. Find the AREA between the curves: $y = x^3 - x^2 + x + 1$ and $y = 2x^2 - x + 1$
   (0.5)