Name:_____                    Score:_____

**Instructions:** You must show supporting work to receive full and partial credits. No text book, notes, formula sheets allowed.

**1(4pts)** Find the area of the region bounded by these curves: $y = x, y = x^2$. Sketch the region and include all relevant information in your setup.

**1(3pts each)** Let $R$ be the region bounded by these curves: $y = x^2, y = 0, x = 1$. Find the volume of the solid obtained by rotating the region $R$ about the line $x = 2$. Sketch the solid and include all relevant information in each setup below.

(a) Use the method of washer.

(b) Use the method of cylindrical shell.

*(... The End)*