MATH 160 Homework 28 Name: _____

Due 11/21 MATH 160 section _____

1. Find the area between $y = 1$ and $y = \cos^2(x)$ over the interval $[0, \pi]$ (hint: use that $\sin^2(x) = (1 - \cos(2x))/2$).
2. Find the area between $y = x$ and $y = \sin(\pi x/2)$.
3. Find the area between $x = 12y^2 - 12y^3$ and $x = 2y^2 - 2y$.
4. Find the area enclosed by $y = x$, $y = 1$, and $y = x^2/4$ over $[0, 2]$.
5. Find the area enclosed by $y = x^4 - 4x^2 + 4$ and $y = x^2$.