

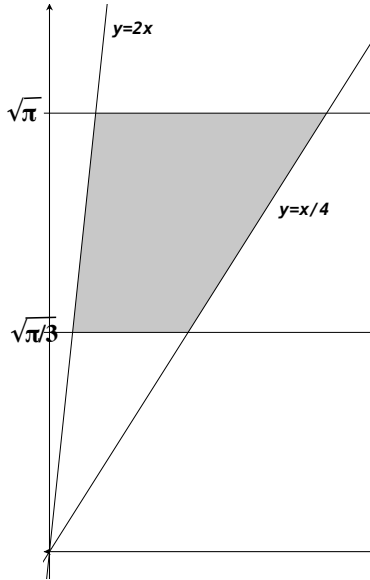
Exam II Hints and Answers
Math 126 A & B Spring 2012

1. $\left(-\frac{104}{3}, 40, -32\right)$

2. $f(3.05, 4.05) \approx 10.15$

3. There is a saddle point at $(0, 0)$ and a local maximum at $(1, 1)$.

4. $\iint_D \sin y^2 dA = \int_{\sqrt{\pi/3}}^{\sqrt{\pi}} \int_{y/2}^{4y} \sin y^2 dx dy = \frac{21}{8}$



5. $m = \int_{\pi/6}^{\pi/2} \int_1^4 \frac{r \cos \theta}{\sqrt{r \sin \theta}} r dr d\theta = \frac{124}{5} \left(1 - \sqrt{\frac{1}{2}}\right)$