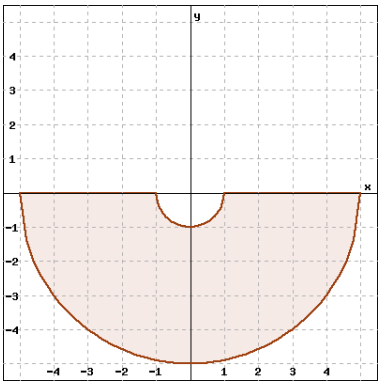
Math 251 **Quiz 07 (WeBWorK 10)**

November 20, 2013; 10 minutes Name: _____

This quiz is *open-note*, but no books or calculators may be used. In calculation, you can show work at your discretion, but remember that I can't give partial credit for calculations I can't see. Explain anything that seems to need explaining.

1. (8 points) Suppose R is the shaded region in the figure.



As an iterated integral in polar coordinates,

$$\iint_R f(x,y)\,dA = \int_A^B \int_C^D f(r,\theta) r\,dr\,d\theta$$

with limits of integration

(a) $A =$
(b) $B =$
(c) $C =$
(d) $D =$

2. (4 points) Set up **BUT DO NOT EVALUATE** an integral for the volume of the solid region under the graph of $z = e^{-x^2-y^2}$ and above the disk $x^2 + y^2 \le a^2$, where $a > 0$.