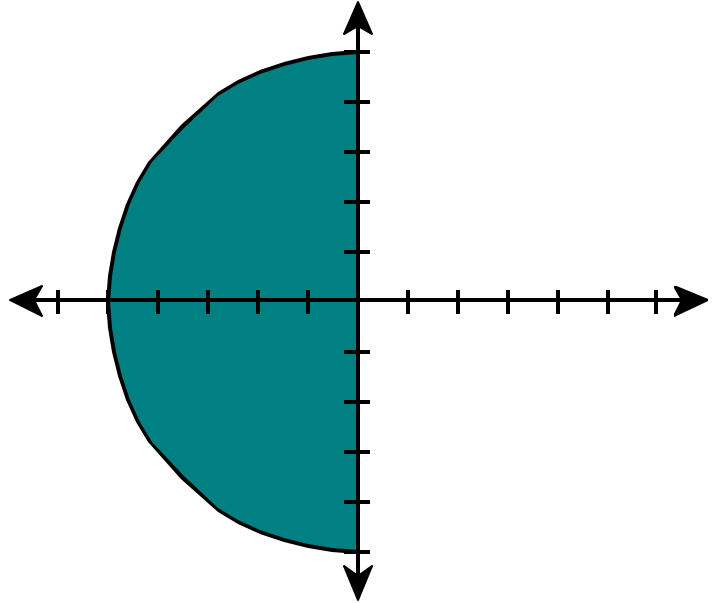


Quiz 3      Calculus 3      10/19/2005

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Set up limits of integration in polar coordinates for the integral of a function  $f$  on the region  $R$  shown below:



2. Set up an integral in polar coordinates for the volume of the region between  $z = 9 - x^2 - y^2$  and the  $xy$ -plane.