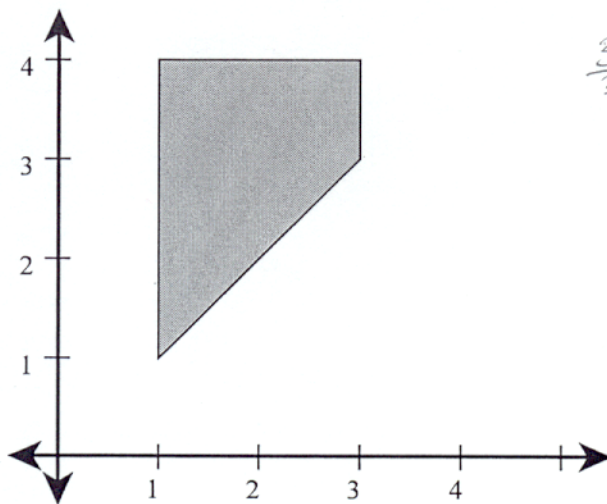


Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Write $\int_R f dA$ as an iterated integral for the region R shown below:

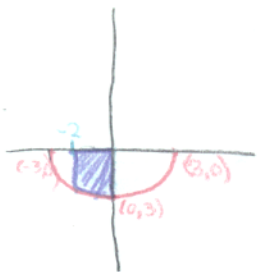
bounded by $x=1$, $x=3$, $y=4$, $y=x$



yes!
 $\frac{3-1}{3-1} = 1 \Rightarrow \text{slope so } y=x$

$\int_{x=1}^{x=3} \int_{y=x}^{y=4} f dy dx$ Great

2. Carefully sketch the region of integration represented by the integral $\int_{-2}^0 \int_{-\sqrt{9-x^2}}^0 2xy dy dx$.



$-\sqrt{9-x^2}$ is the bottom half of a circle with radius 3

the region we are looking for goes from the circle to zero and from $x=-2$ to $x=0$

Wonderful!