

1. AREA PROBLEMS

Set up the integrals for the following problems. Include sketches. You do not need to solve the integrals.

1. The area of the region bounded between $y = \sqrt{x}$ and $y = \frac{x}{2}$
A With respect to x *B* With respect to y .

2. The area of the region bounded between $x^2 + y^2 = 8$, $x = \frac{1}{2}y^2$ and $y = 0$.
A With respect to x *B* With respect to y .

3. The area of the region bounded between $y = \ln x$, the x and y axes, and $y = 2$.
A With respect to x *B* With respect to y .