## 1 Double Integrals

$$\int_{0}^{3} \int_{0}^{1} 7xy \sqrt{x^{2} + y^{2}} \, dy \, dx 
\int_{0}^{3} \int_{0}^{1} 7xy \sqrt{x^{2} + y^{2}} \, dy \, dx 
\int_{0}^{\pi/4} \int_{0}^{6} x \sec^{2}(y) \, dA 
\int_{0}^{\pi/4} \int_{0}^{6} x \sec^{2}(y) \, dx \, dy 
\int_{0}^{\pi/4} \int_{0}^{6} x \sec^{2}(y) \, dA 
\int \int_{y^{2}}^{y+12} y \, dx \, dy$$