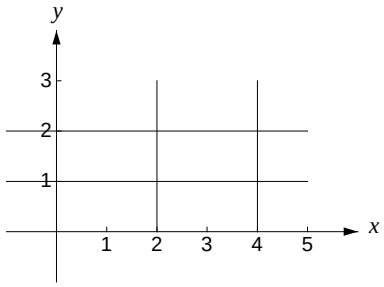
Practicing Limits for Double Integrals

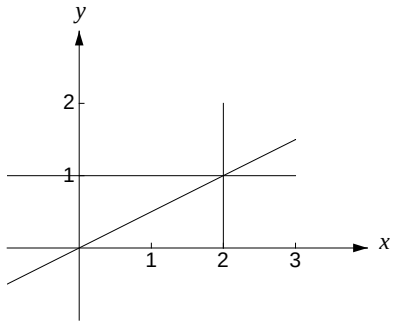
Name:_____

Shade the region that matches the integral. Rewrite the integral using the opposite order of integration.

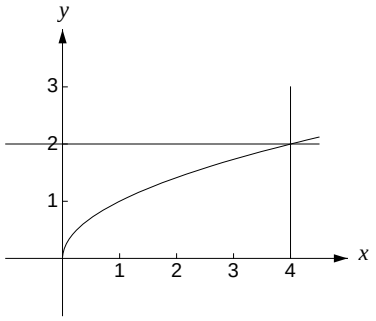
1) $\int_1^2 \int_2^4 f(x,y)\,dxdy$



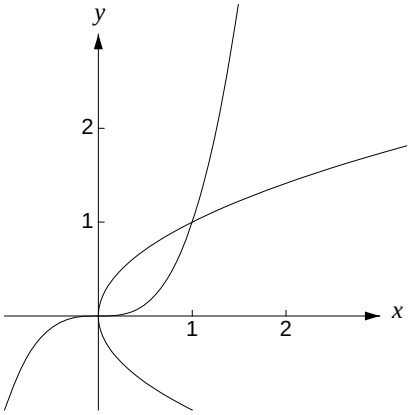
2) $\int_0^2 \int_{x/2}^1 f(x,y)\,dydx$



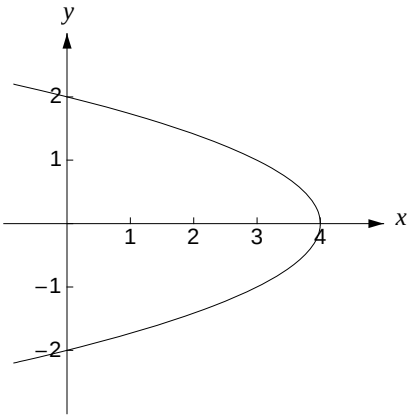
3) $\int_0^4 \int_{\sqrt{x}}^2 f(x,y)\,dydx$



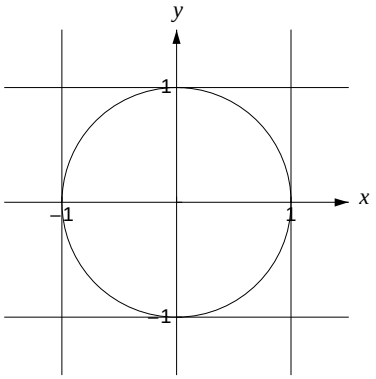
4) $\int_0^1 \int_{y^2}^{\sqrt[3]{y}} f(x,y)\,dxdy$



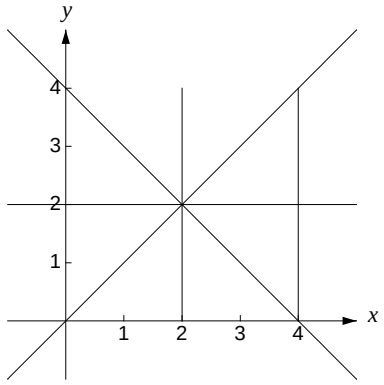
5) $\int_{-2}^2 \int_0^{4-y^2} f(x,y)\,dxdy$



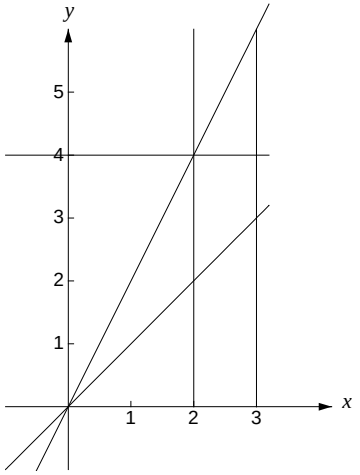
6) $\int_0^1 \int_{-\sqrt{1-y^2}}^{\sqrt{1-y^2}} f(x,y)\,dxdy$



7) $\int_0^2 \int_y^{4-y} f(x,y)\,dxdy$



8) $\int_0^2 \int_x^{2x} f(x,y)\,dydx$



9) $\int_0^3 \int_{4y/3}^{\sqrt{25-y^2}} f(x,y)\,dxdy$