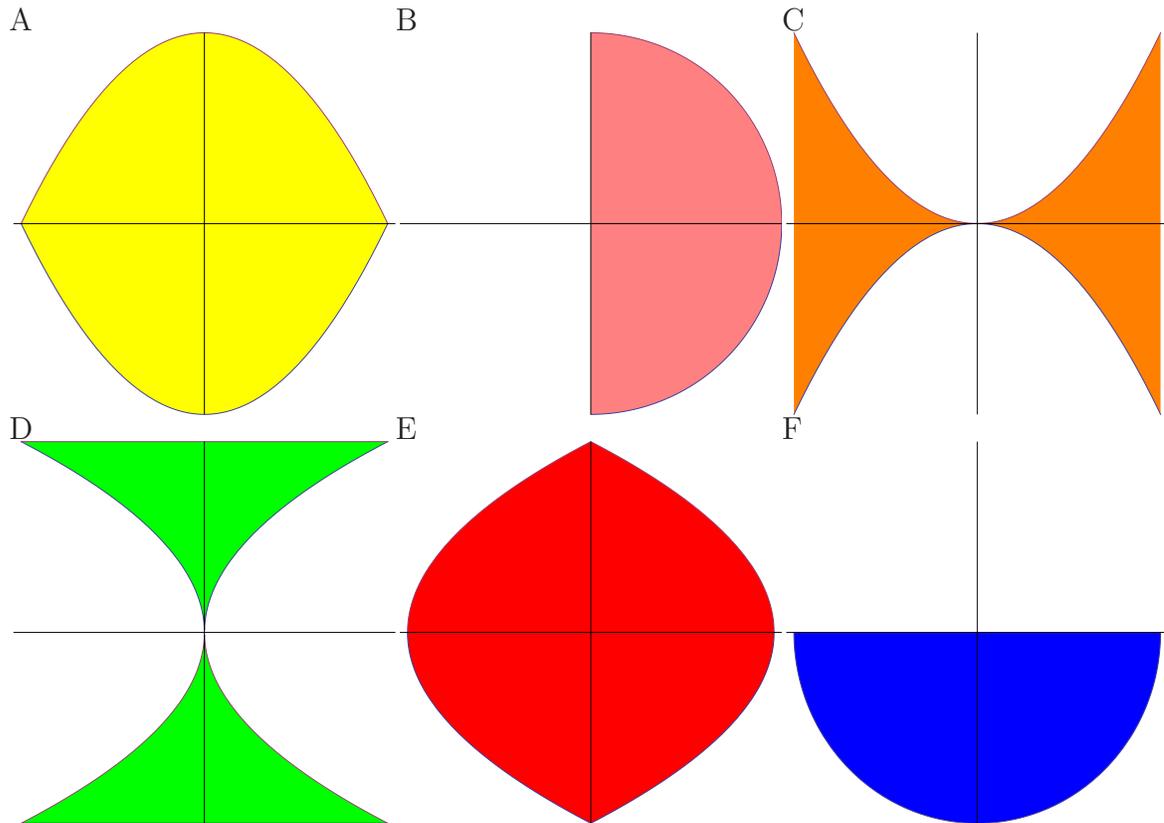


Problem 2) (10 points)

a) (6 points) Match the integration regions with the integrals. Each integral matches exactly one region $A - F$.



Enter A-F	Integral
	$\int_{-1}^1 \int_{-x^2}^{x^2} f(x, y) dydx.$
	$\int_{-1}^1 \int_{-y^2}^{y^2} f(x, y) dx dy.$
	$\int_{-1}^1 \int_{y^2-1}^{1-y^2} f(x, y) dx dy.$
	$\int_{-1}^1 \int_0^{\sqrt{1-y^2}} f(x, y) dx dy.$
	$\int_{-1}^1 \int_{x^2-1}^{1-x^2} f(x, y) dy dx.$
	$\int_{-1}^1 \int_{-\sqrt{1-x^2}}^0 f(x, y) dy dx.$

b) (4 points) Fill in one word names (like “Heat”, “Wave” etc) for the partial differential equations:

Enter one word	PDE
	$g_x = g_y$
	$g_{xx} = g_{yy}$
	$g_{xx} = -g_{yy}$
	$g_x = g_{yy}$

Problem 3) (10 points)