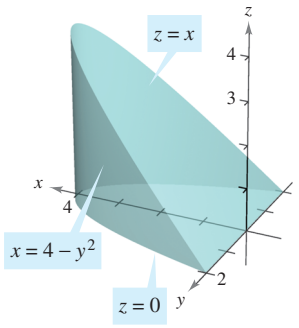
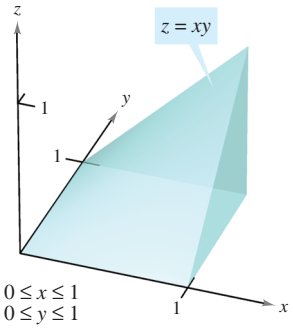
Problem 1: For each part below, set up the integral $\int_W f(x,y,z)\,dV$ where W is the region of xyz-space shown.

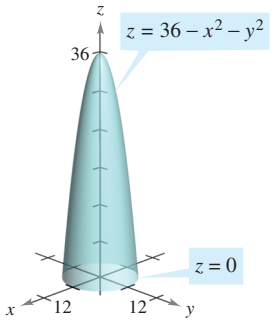
(a)



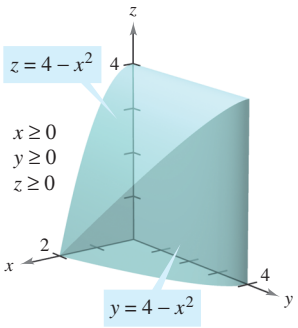
(b)



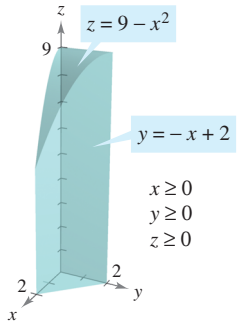
(c)



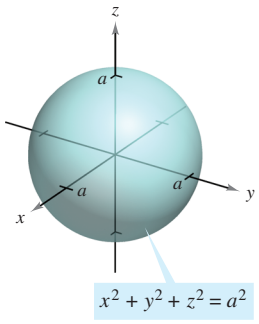
(d)



(e)



(f)



Problem 2: For each part below, sketch the region of integration.

(a) $\int_0^1 \int_{-1}^1 \int_0^{\sqrt{1-x^2}} f(x, y, z)\ dzdxdy$

(b) $\int_{-1}^1 \int_0^1 \int_{-\sqrt{1-z^2}}^{\sqrt{1-z^2}} f(x, y, z)\ dydzdx$

(c) $\int_0^1 \int_{-\sqrt{1-z^2}}^{\sqrt{1-z^2}} \int_0^{\sqrt{1-x^2-z^2}} f(x, y, z)\ dydxdz$