

Exercise 1

Consider the vector field

$$\mathbf{v} = \delta_1 x_1 + \delta_2 x_3 + \delta_3 x_2$$

Evaluate both sides of Eq. A.5-1 over the region bounded by the planes $x_1 = 0$, $x_1 = 1$; $x_2 = 0$, $x_2 = 2$; $x_3 = 0$, $x_3 = 4$.