(1) Find the surface area of the part of the plane $z = 2 + 3x + 4y$ that lies above the rectangle $[0, 5] \times [1, 4]$.

(2) Find the surface area of the part of the surface $z = xy$ that lies within the cylinder $x^2 + y^2 = 1$.

(3) Evaluate $\int \int \int_E 2x \, dV$ where $E = \{(x, y, z) \in \mathbb{R}^3 \mid y \in [0, 2], \; x \in [0, \sqrt{4 - y^2}], \; z \in [x, 2x]\}$.

(4) Compute $\int \int \int_E 6xy \, dV$ where E lies under the plane $z = 1 + x + y$ and above the region in the xy-plane bounded by the curves $y = \sqrt{x}$, $y = 0$ and $x = 1$.

(5) Compute $\int \int \int_E xz \, dV$ where E is the solid tetrahedron with vertices $(0, 0, 0)$, $(0, 1, 0)$, $(1, 1, 0)$ and $(0, 1, 1)$.

(6) Evaluate $\int \int \int_E x^2 \, dV$ where E is the solid that lies within the cylinder $x^2 + y^2 = 1$, above the plane $z = 0$ and below the cone $z^2 = 4x^2 + 4y^2$.

(7) Evaluate the triple integral $\int \int \int_B (x^2 + y^2 + z^2) \, dV$ where B is the solid unit ball $x^2 + y^2 + z^2 \leq 1$.