1.(1 pt) Find the surface area of the part of the plane $2x + 3y + z = 5$ that lies inside the cylinder $x^2 + y^2 = 25$.

2.(1 pt) Find the surface area of the part of the circular paraboloid $z = x^2 + y^2$ that lies inside the cylinder $x^2 + y^2 = 25$.

3.(1 pt) The vector equation $\mathbf{r}(u, v) = u\cos v\mathbf{i} + u\sin v\mathbf{j} + v\mathbf{k}$, $0 \le v \le 10\pi$, $0 \le u \le 1$, describes a helicoid (spiral ramp). What is the surface area?

4.(1 pt) Find the surface area of the surface of revolution generated by revolving the graph $y = x^3$, $0 \le x \le 4$ around the x-axis.