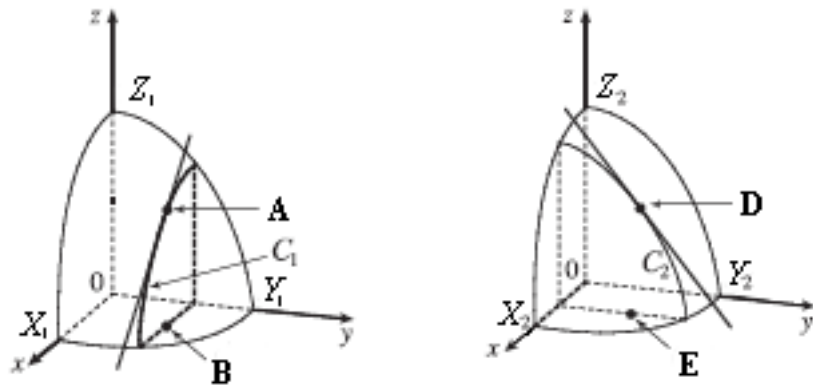


$f(x, y) = 53 - 8x^2 - y^3 \Rightarrow f_x(x, y) = -16x$ and
 $f_y(x, y) = -3y^2 \Rightarrow f_x(-2, 6) = 32$ and $f_y(-2, 6) = -108$. The graph of f
 is the surface $z = 53 - 8x^2 - y^3$ and the vertical plane $y = 6$ intersects it in the
 parabola $z = -163 - 8x^2, y = 6$ (the curve C_1 in the first figure). The slope of
 the tangent line to this parabola at $(-2, 6, -195)$ is $f_x(-2, 6) = 32$. Similarly
 the plane $x = -2$ intersects the paraboloid in the parabola $z = 21 - y^3,$
 $x = -2$ (the curve C_2 in the second figure) and the slope of the tangent line
 at $(-2, 6, -195)$ is $f_y(-2, 6) = -108$.



$$\mathbf{A} = \mathbf{D} = (-2, 6, -195), \mathbf{B} = \mathbf{E} = (-2, 6);$$

$$X_1 = X_2 = \sqrt[2]{53/8}, Y_1 = Y_2 = \sqrt[3]{53}, Z_1 = Z_2 = 53.$$