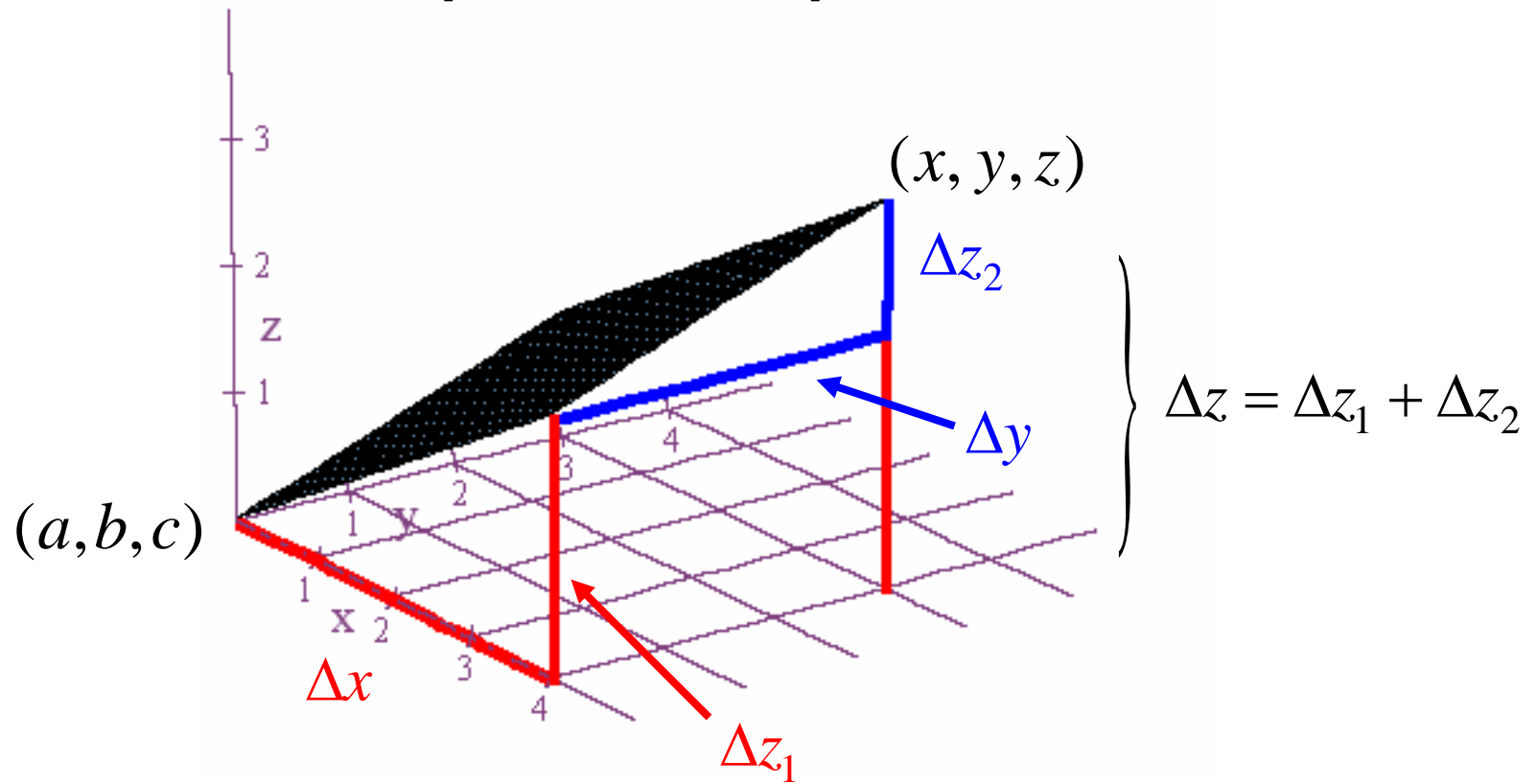
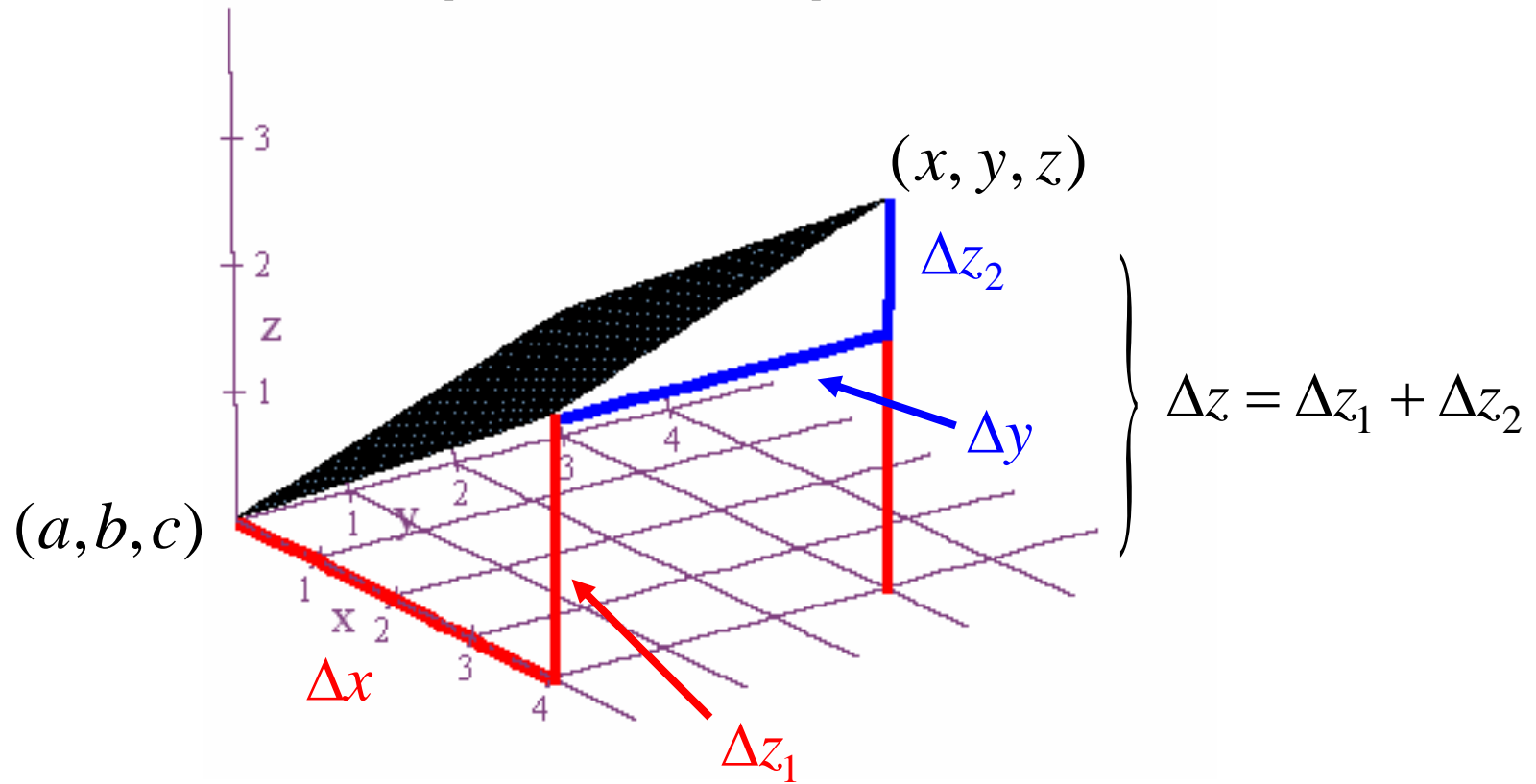


The Equation for a plane



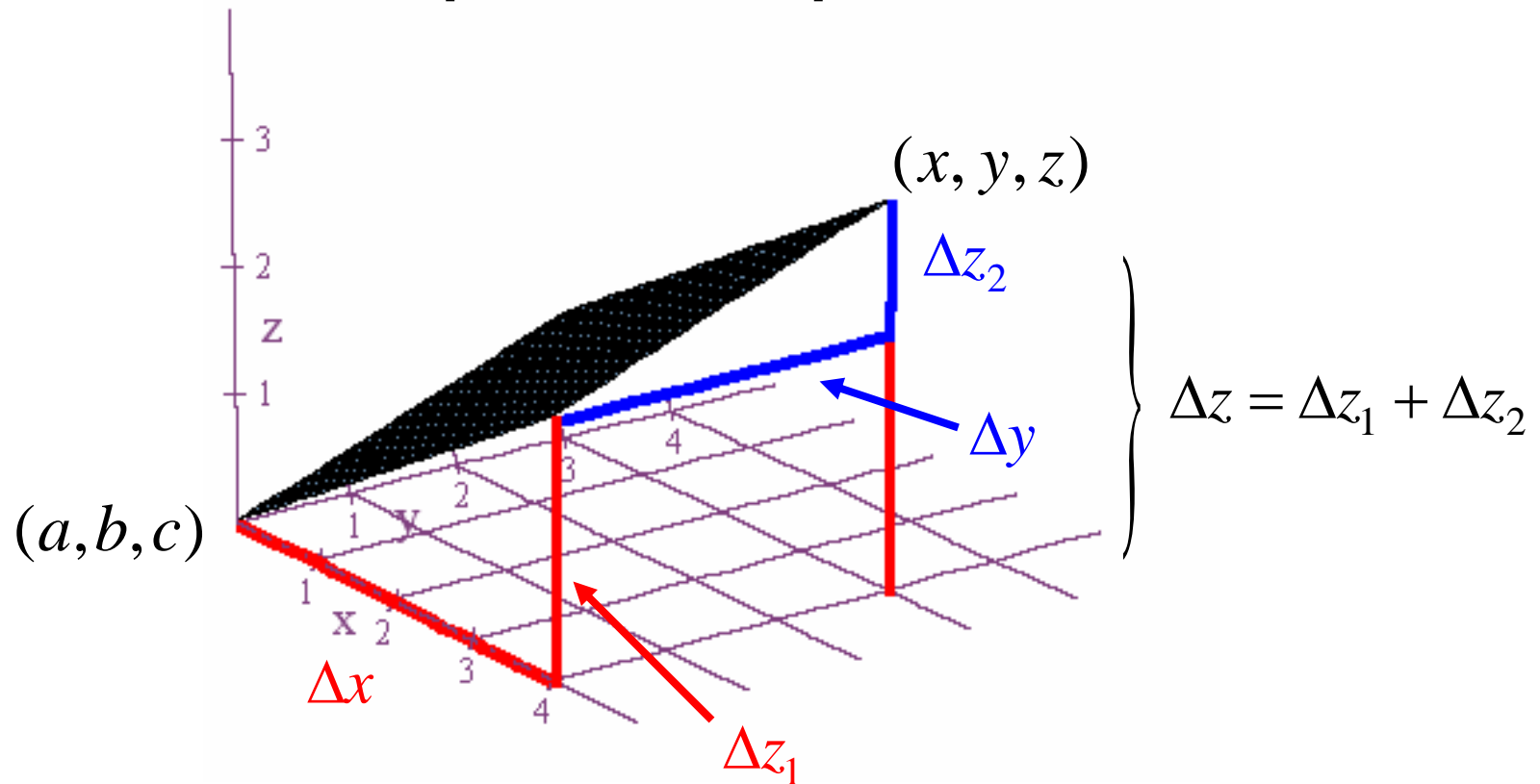
The Equation for a plane



$$\text{slope}_x = m_x = \frac{\Delta z_1}{\Delta x}$$

$$\text{slope}_y = m_y = \frac{\Delta z_2}{\Delta y}$$

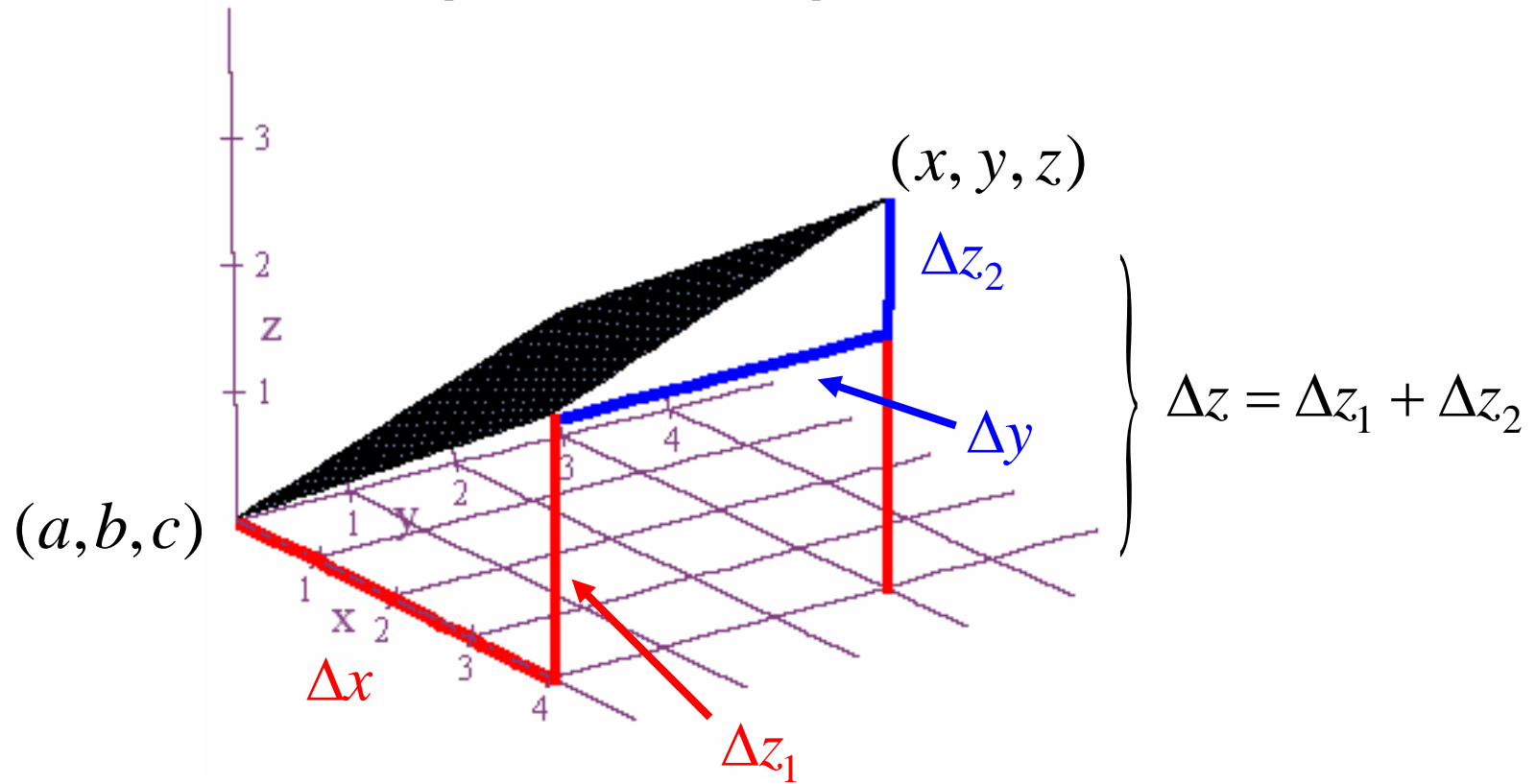
The Equation for a plane



$$\text{slope}_x = m_x = \frac{\Delta z_1}{\Delta x} \Rightarrow \Delta z_1 = m_x \Delta x = m_x (x - a)$$

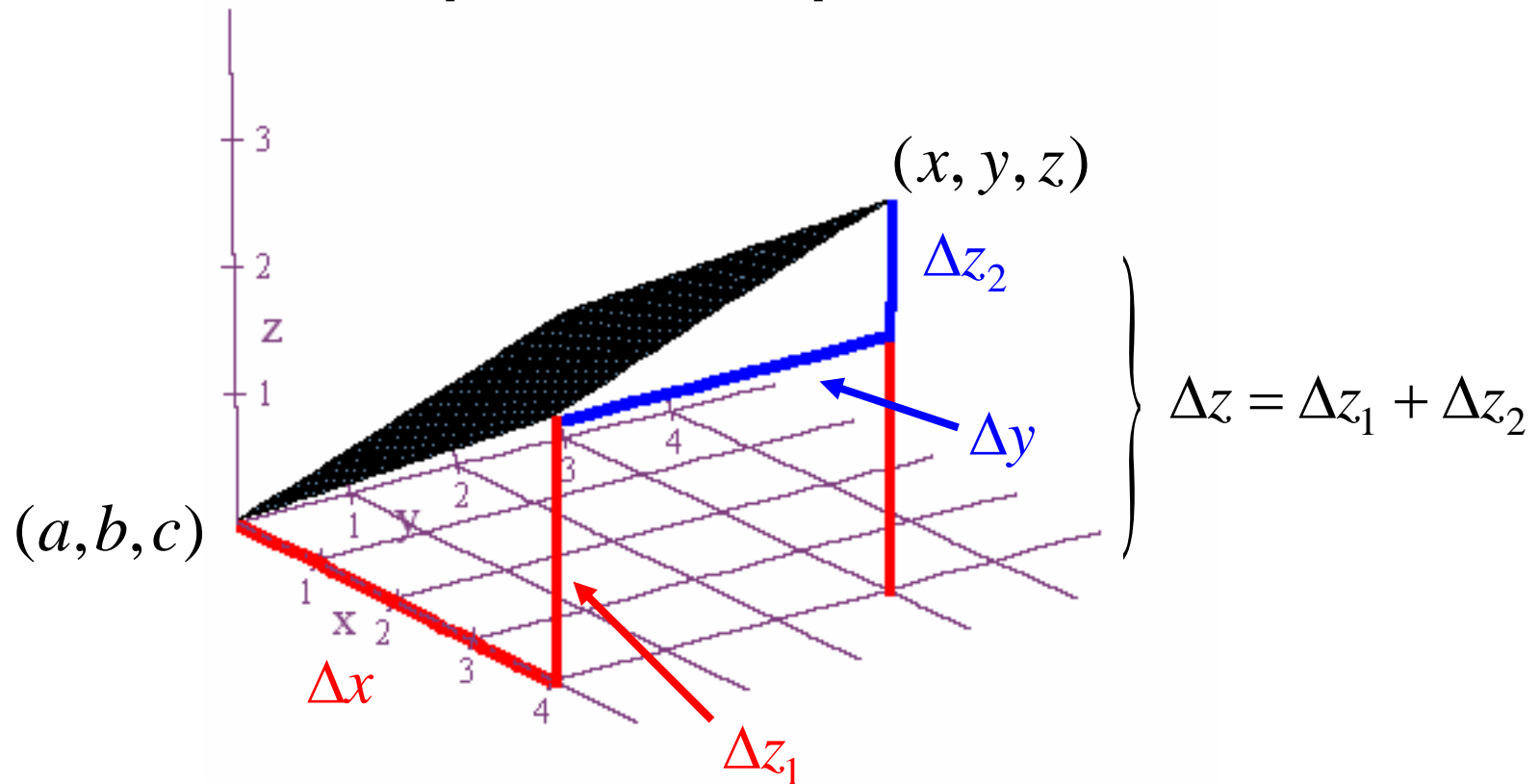
$$\text{slope}_y = m_y = \frac{\Delta z_2}{\Delta y} \Rightarrow \Delta z_2 = m_y \Delta y = m_y (y - b)$$

The Equation for a plane



$$z - c = \Delta z = \Delta z_1 + \Delta z_2 = m_x(x - a) + m_y(y - b)$$

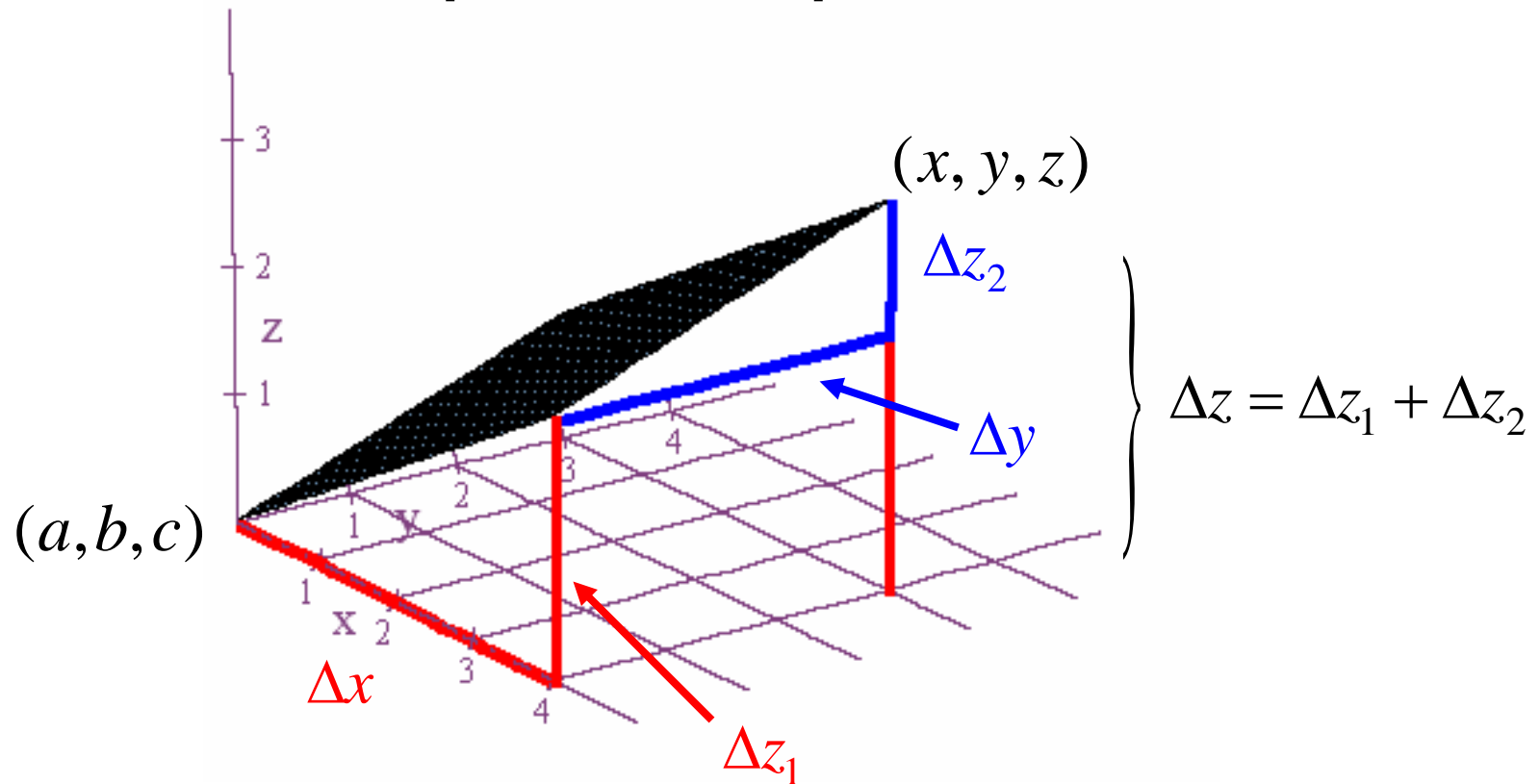
The Equation for a plane



$$z - c = \Delta z = \Delta z_1 + \Delta z_2 = m_x(x - a) + m_y(y - b)$$

$$z = m_x(x - a) + m_y(y - b) + c$$

The Equation for a plane



$$z - c = \Delta z = \Delta z_1 + \Delta z_2 = m_x(x - a) + m_y(y - b)$$

$$z = m_x(x - a) + m_y(y - b) + c$$

$z = Ax + By + C$ is a plane