Binormal = $B(t) = T(t) \times N(t)$

$$\begin{matrix} \vec{i} & \vec{j} & k \\ 2/3\cos t & \sqrt{5}/3 & -2/3\sin t \\ -\sin t & 0 & -\cos t \end{matrix}$$

$$i\left(-\frac{\sqrt{5}}{3}\cos t\right), -\vec{j}\left(-\frac{2}{3}(\cos t)^2\right), \vec{K}\left(\frac{\sqrt{5}}{3}\sin t\right)$$

$$B(t) = \left(-\frac{\sqrt{5}}{3}\cos t, \frac{2}{3}(\cos t)^2, \frac{\sqrt{5}}{3}\sin t\right)$$

$$B(0) = \left(-\frac{\sqrt{5}}{3}, \frac{2}{3}, 0\right)$$

c) Plano osculador:

$$\left(-\frac{\sqrt{5}}{3}, \frac{2}{3}, 0\right) \times \left(x, y-1, z-2\right)$$

$$-\frac{\sqrt{5}}{3}x + \frac{2}{3}y - \frac{2}{3} = 0$$

$$-\sqrt{5}x + 2y = 2$$