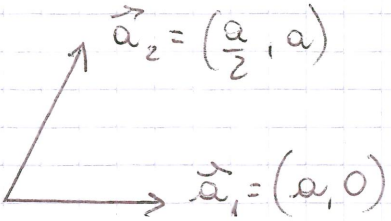
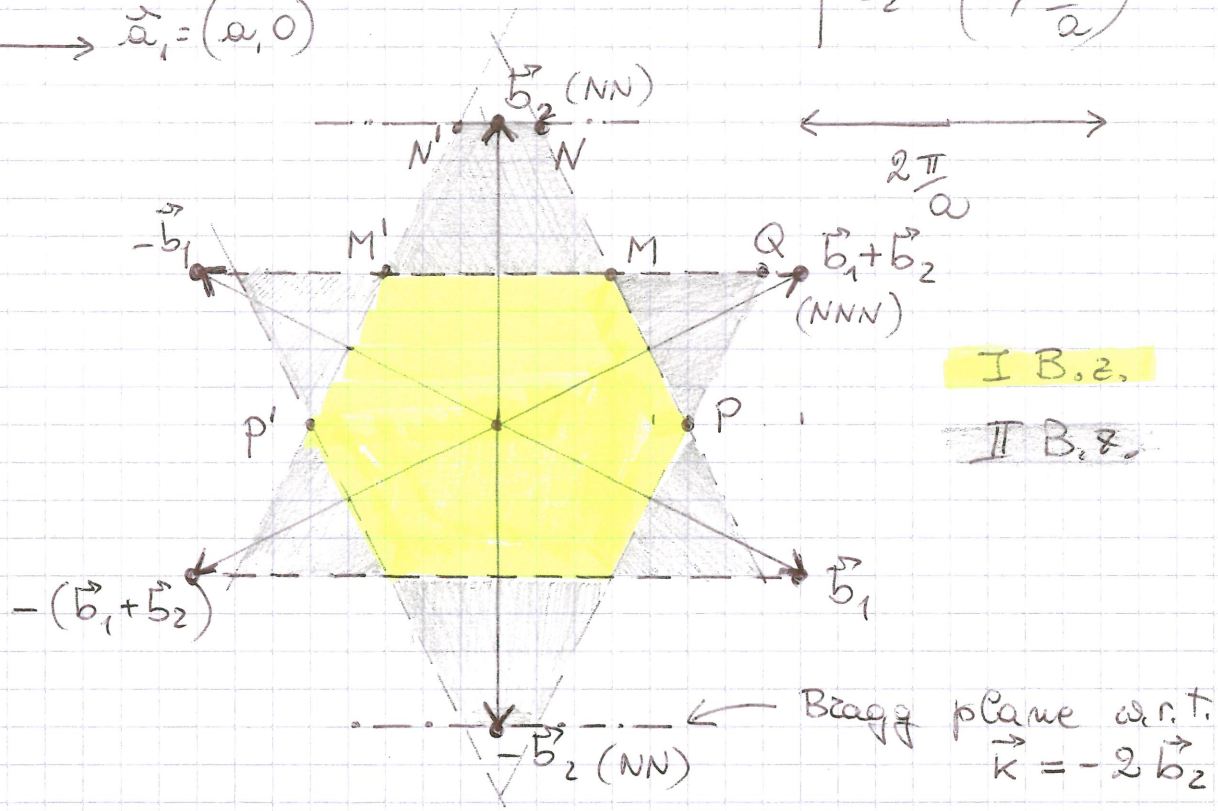
14/7/2014 Ex. 1



OBLIQUE LATTICE $\Rightarrow$

$$\begin{cases} \vec{b}_1 = \frac{\pi}{a}(2, -1) \\ \vec{b}_2 = \left(0, \frac{2\pi}{a}\right) \end{cases}$$



$$M = \frac{\pi}{a}\left(\frac{3}{4}, 1\right)$$

$$P = \left(\frac{5}{4}\frac{\pi}{a}, 0\right)$$

$$N = \left(\frac{\pi}{a}, \frac{2\pi}{a}\right)$$

$$Q = \left(\frac{7}{4}\frac{\pi}{a}, \frac{\pi}{a}\right)$$

$$\Omega_{I\,BZ} = \left|\vec{b}_1 \times \vec{b}_2\right| = \left(\frac{2\pi}{a}\right)^2$$