

□ Draw a few lattice planes corresponding to (320)

Reciprocal Lattice

$$\vec{b}_1 = \frac{2\pi}{a} \hat{x}$$

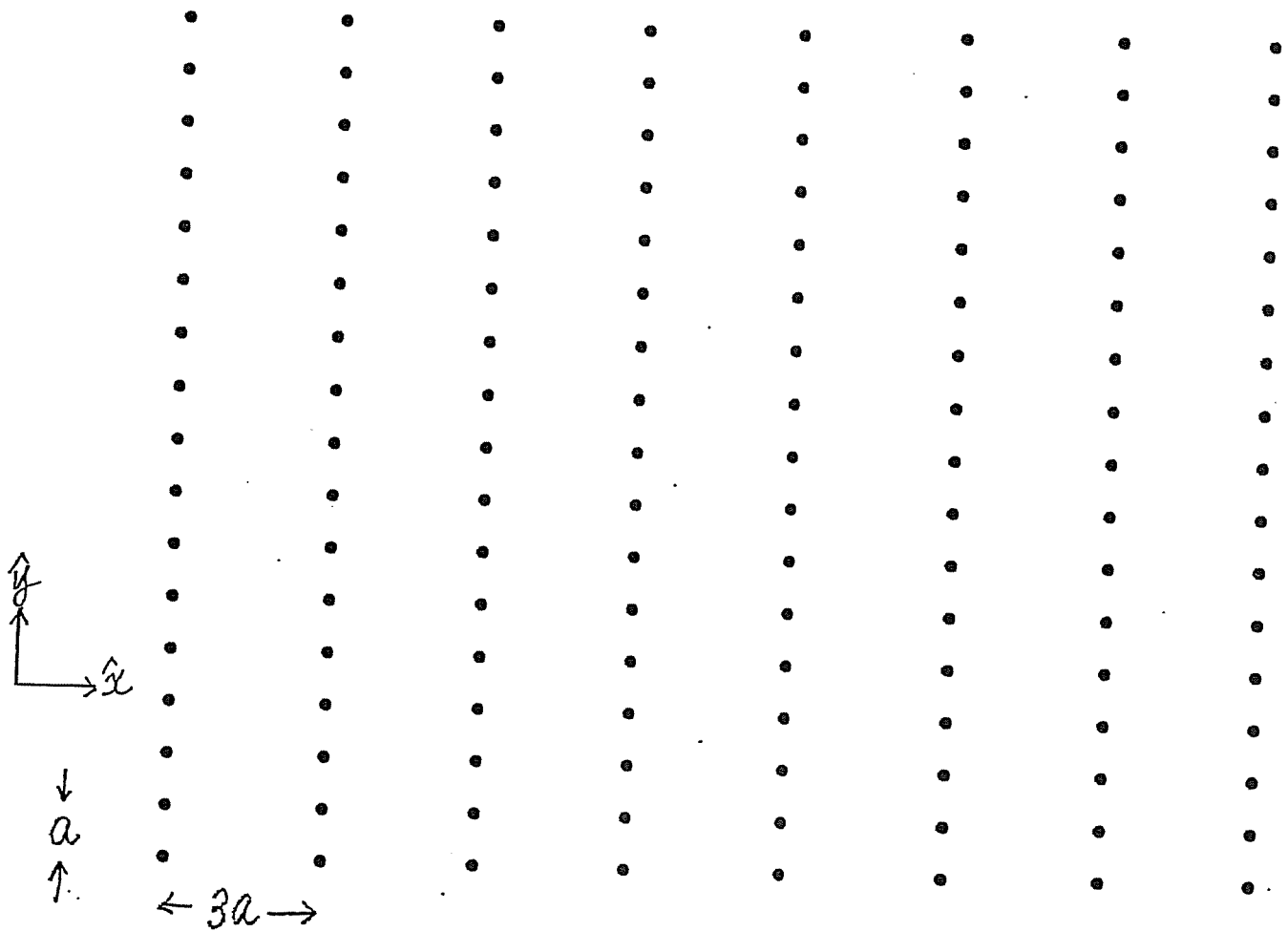
$$\vec{b}_2 = \frac{2\pi}{a} \hat{y}$$

• Draw \vec{b}_1, \vec{b}_2

• Draw $\vec{G}(320) = 3\vec{b}_1 + 2\vec{b}_2$

• Using the reciprocal lattice and the direct lattice, convince

yourself that $\vec{G}(320)$ is perpendicular to the set of planes (320)



- Write down 4 possible sets of primitive vectors \vec{a}_1, \vec{a}_2 and illustrate them in the figure
- For each set of \vec{a}_1, \vec{a}_2 , illustrate the primitive cell and find the area of the primitive cell.
- Does the area depend on the choice of primitive vectors?