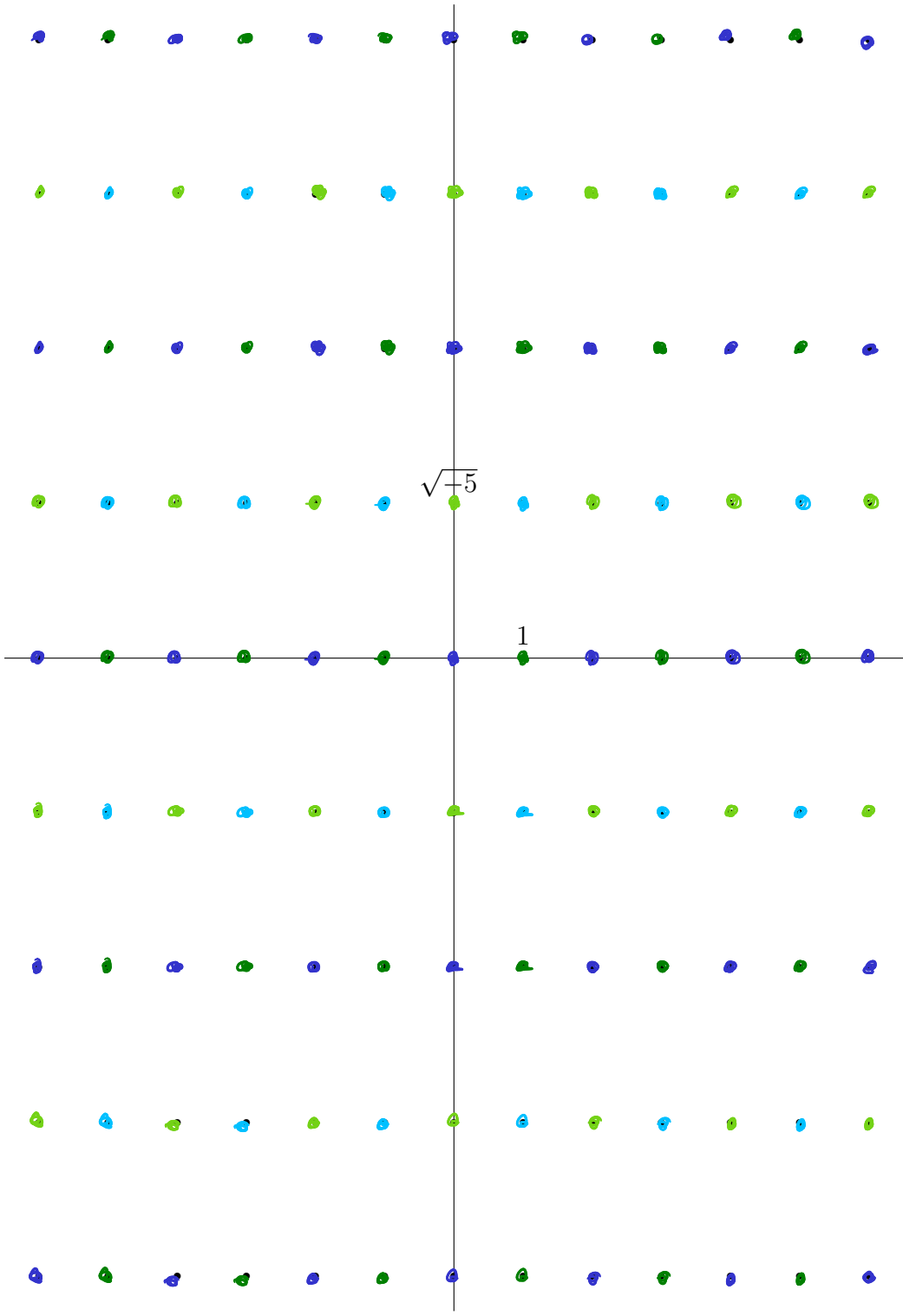


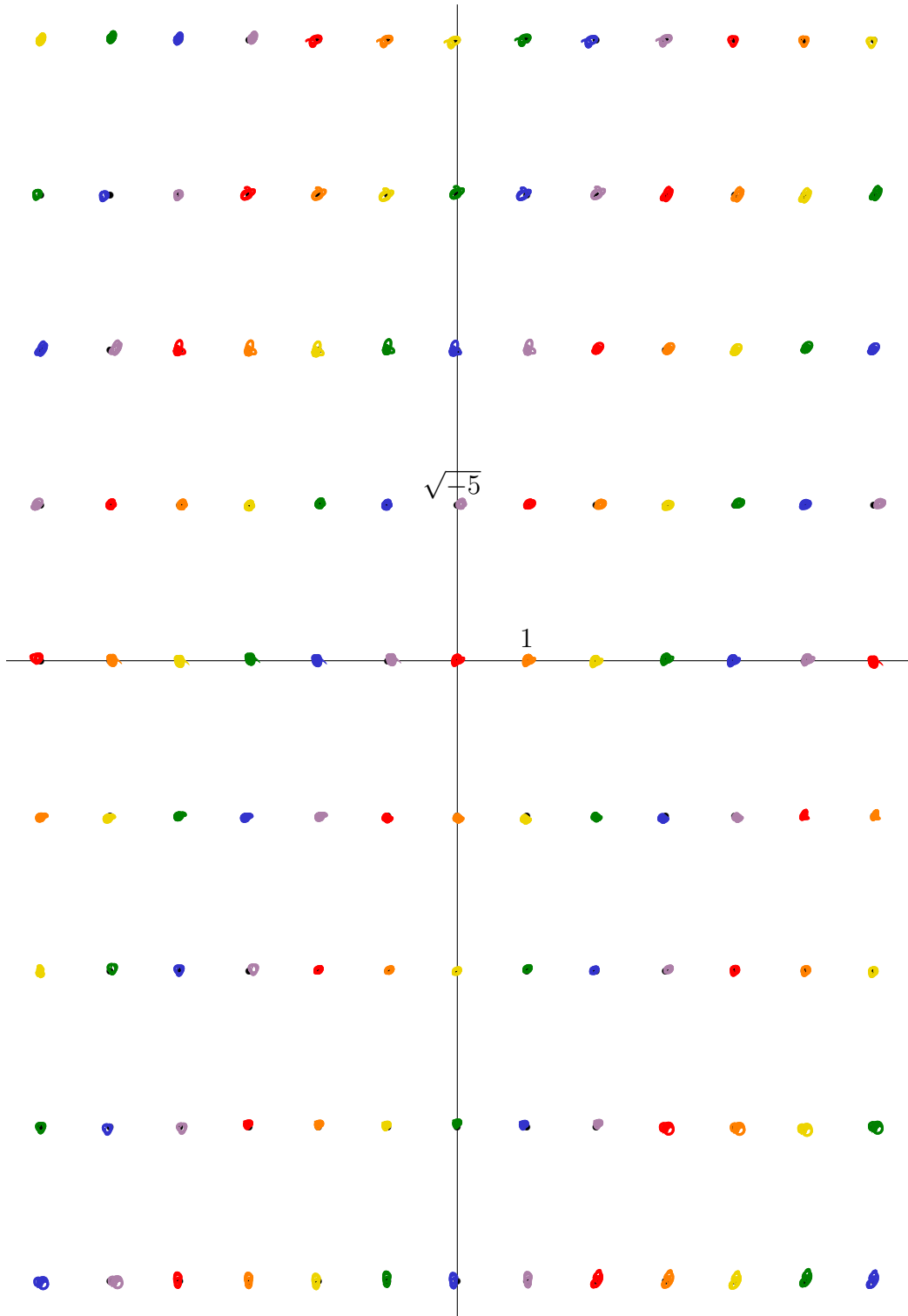
$\mathbb{Z}[\sqrt{-5}] : \langle 2 \rangle$



$$\mathbb{Z}[\sqrt{-5}] / \langle 2 \rangle = \left\{ \begin{array}{cccc} \bar{0} & \bar{1} & \overline{\sqrt{-5}} & \overline{1+\sqrt{-5}} \\ \bar{2} & \bar{3} & \bar{4} & \bar{5} \end{array} \right\}$$

$$\mathbb{Z}[\sqrt{-5}] / \langle 2 \rangle / \langle \overline{1+\sqrt{-5}} \rangle = \left\{ \begin{array}{c} \bar{0} \\ \bar{1} \end{array} \right\}$$

$\mathbb{Z}[\sqrt{-5}]$ :  $\langle 1 + \sqrt{-5} \rangle$

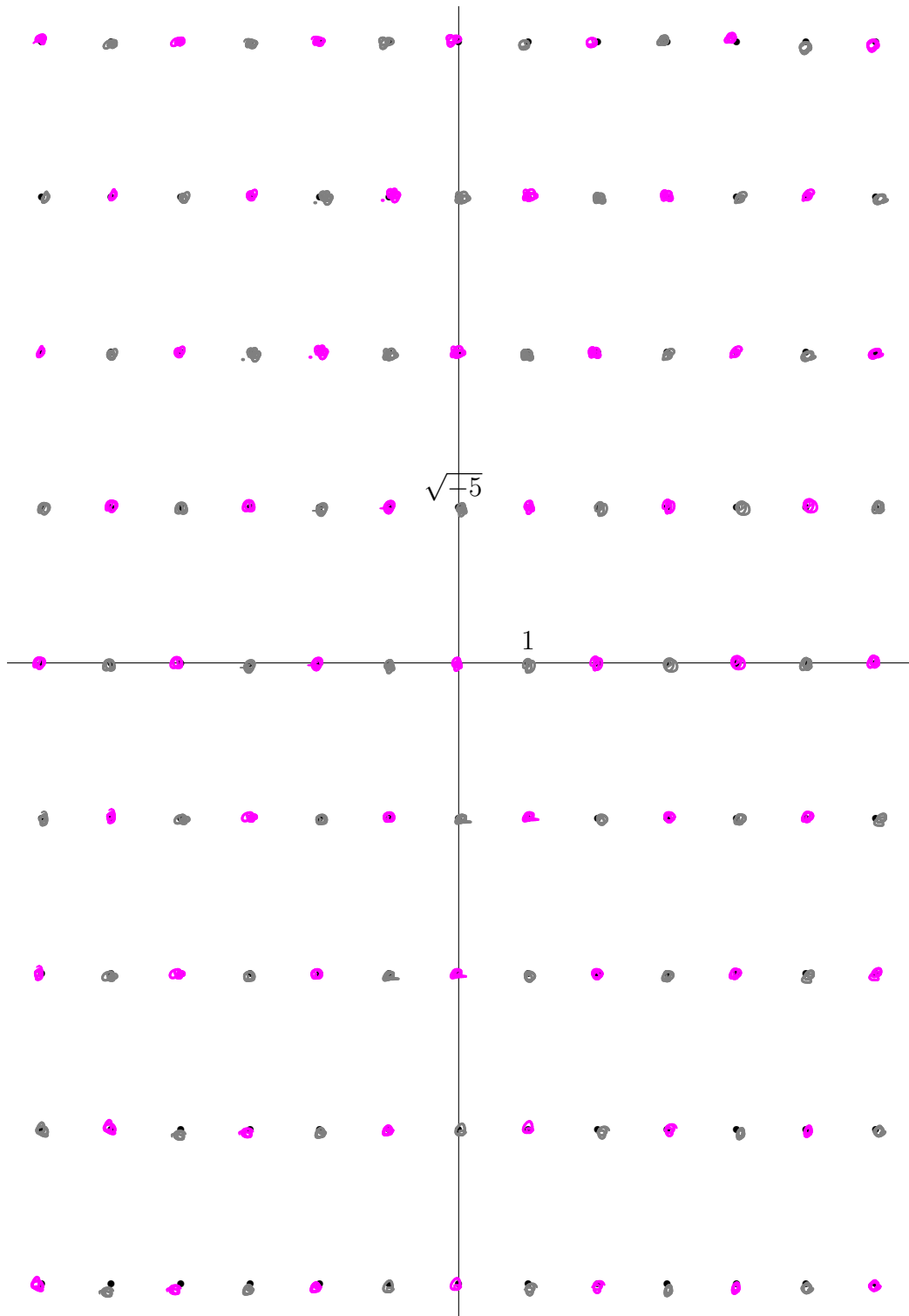


$$\mathbb{Z}[\sqrt{-5}] / \langle 1 + \sqrt{-5} \rangle = \left\{ \begin{array}{cccccc} \bar{0} & \bar{1} & \bar{2} & \bar{3} & \bar{4} & \bar{5} \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ \hline \end{array} \right\}$$

$\langle \bar{2} \rangle$

$$\mathbb{Z}[\sqrt{-5}] / \langle 1 + \sqrt{-5} \rangle / \langle \bar{2} \rangle = \left\{ \begin{array}{cc} \bar{0} & \bar{1} \\ \vdots & \vdots \end{array} \right\}$$

$\mathbb{Z}[\sqrt{-5}]$ :  $\langle 2, 1+\sqrt{-5} \rangle$   $\bar{0}$   $\bar{1}$



$$\mathbb{Z}[\sqrt{-5}] / \langle 2, 1+\sqrt{-5} \rangle = \left\{ \begin{array}{l} \bar{0} \\ \bar{1} \end{array} \right\}$$