

1.

$$\left(\frac{\sqrt{3}}{2}x - \frac{3}{2}y\right) \left((x^2 - y^2 + x + 1)^2 + (2xy + y)^2\right) + 2xy + y = 0$$

2.

$$\begin{aligned} \left(-3xy - \frac{\sqrt{3}}{2}(x^2 - y^2)\right) \left((x^2 - y^2 + x + 1)^2 + (2xy + y)^2\right) - \\ -y(x^2 - y^2 + x + 1) + (x + 1)(2xy + y) = 0 \end{aligned}$$

With some aproximative methods I get theese roots:

- $a = x + yi = -0,381503871916 - 0.357088906042i$
- $a = x + yi = -0.0808173623568 - 0.530690343279i$