

$$F(t, x) := \begin{bmatrix} x_0 \cdot x_1 + 2x_1 + (x_0)^2 + (x_1)^2 - 1 \\ -(x_0)^2 - 2 \cdot x_0 \end{bmatrix}$$

$$V1 := \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

$$X1 := \text{rkfixed}(V1, 0, 30, 500, F)$$

$$V2 := \begin{pmatrix} 0 \\ -0.4 \end{pmatrix}$$

$$X2 := \text{rkfixed}(V2, 0, 25, 500, F)$$

$$V3 := \begin{pmatrix} 1.2 \\ 0 \end{pmatrix}$$

$$X3 := \text{rkfixed}(V3, 0, 30, 500, F)$$

$$V4 := \begin{pmatrix} 0 \\ 0.46 \end{pmatrix}$$

$$X4 := \text{rkfixed}(V4, 0, 30, 500, F)$$

$$V5 := \begin{pmatrix} -2.5 \\ -2.5 \end{pmatrix}$$

$$X5 := \text{rkfixed}(V5, -15, 50, 500, F)$$

$$V6 := \begin{pmatrix} 0 \\ -1 - \sqrt{2} + 0.001 \end{pmatrix}$$

$$X6 := \text{rkfixed}(V6, 0, -4.4, 500, F)$$

$$V7 := \begin{pmatrix} 0 \\ -1 - \sqrt{2} + 0.001 \end{pmatrix}$$

$$X7 := \text{rkfixed}(V7, -10, 70, 500, F)$$

$$V8 := \begin{pmatrix} -0.75 \\ -2.7 \end{pmatrix}$$

$$X8 := \text{rkfixed}(V8, -10, 10, 500, F)$$

$$V9 := \begin{pmatrix} 0.01 \\ -2.42 \end{pmatrix}$$

$$X9 := \text{rkfixed}(V9, 0, 3.6, 500, F)$$

$$V10 := \begin{pmatrix} 1 \\ -3 \end{pmatrix}$$

$$X10 := \text{rkfixed}(V10, 0, -2.45, 500, F)$$

- $X_1^{(2)}$
- $X_2^{(2)}$
- $X_3^{(2)}$
- $X_4^{(2)}$
- $X_5^{(2)}$
- $X_6^{(2)}$
- $X_7^{(2)}$
- $X_8^{(2)}$
- $X_9^{(2)}$
- $X_{10}^{(2)}$
- $-1+\sqrt{2}$
- $-1-\sqrt{2}$

