

### Solution0

$$X0 = 0$$

$$Y0 = 0$$

### Solution1

$$X1 = 1/(2*Ey*Ty-Ey^2+Sy^2-2*Sy*Ty)*(-(2*Ey*Ty-Ey^2+Sy^2-2*Sy*Ty)*(-Ex^2*Sy^2+2*Ex^2*Sy*Ty-Ex^2*Ty^2+Sx^2*Ty^2+2*Ex*Tx*Sy^2-4*Ex*Tx*Sy*Ty+2*Ex*Tx*Ty^2-2*Ey^2*Sx*Tx-Tx^2*Sy^2+2*Tx^2*Sy*Ty+Ey^2*Sx^2-2*Tx^2*Ey*Ty+Tx^2*Ey^2-2*Ey*Ty*Sx^2+4*Ey*Ty*Sx*Tx-2*Sx*Tx*Ty^2))^(1/2)$$

$$Y1 = 1/(-Ex^2+2*Ex*Tx+Sx^2-2*Sx*Tx)*((-Ex^2+2*Ex*Tx+Sx^2-2*Sx*Tx)*(-Ex^2*Sy^2+2*Ex^2*Sy*Ty-Ex^2*Ty^2+Sx^2*Ty^2+2*Ex*Tx*Sy^2-4*Ex*Tx*Sy*Ty+2*Ex*Tx*Ty^2-2*Ey^2*Sx*Tx-Tx^2*Sy^2+2*Tx^2*Sy*Ty+Ey^2*Sx^2-2*Tx^2*Ey*Ty+Tx^2*Ey^2-2*Ey*Ty*Sx^2+4*Ey*Ty*Sx*Tx-2*Sx*Tx*Ty^2))^(1/2)$$

### Solution2

$$X2 = -1/(2*Ey*Ty-Ey^2+Sy^2-2*Sy*Ty)*(-(2*Ey*Ty-Ey^2+Sy^2-2*Sy*Ty)*(-Ex^2*Sy^2+2*Ex^2*Sy*Ty-Ex^2*Ty^2+Sx^2*Ty^2+2*Ex*Tx*Sy^2-4*Ex*Tx*Sy*Ty+2*Ex*Tx*Ty^2-2*Ey^2*Sx*Tx-Tx^2*Sy^2+2*Tx^2*Sy*Ty+Ey^2*Sx^2-2*Tx^2*Ey*Ty+Tx^2*Ey^2-2*Ey*Ty*Sx^2+4*Ey*Ty*Sx*Tx-2*Sx*Tx*Ty^2))^(1/2)$$

$$Y2 = 1/(-Ex^2+2*Ex*Tx+Sx^2-2*Sx*Tx)*((-Ex^2+2*Ex*Tx+Sx^2-2*Sx*Tx)*(-Ex^2*Sy^2+2*Ex^2*Sy*Ty-Ex^2*Ty^2+Sx^2*Ty^2+2*Ex*Tx*Sy^2-4*Ex*Tx*Sy*Ty+2*Ex*Tx*Ty^2-2*Ey^2*Sx*Tx-Tx^2*Sy^2+2*Tx^2*Sy*Ty+Ey^2*Sx^2-2*Tx^2*Ey*Ty+Tx^2*Ey^2-2*Ey*Ty*Sx^2+4*Ey*Ty*Sx*Tx-2*Sx*Tx*Ty^2))^(1/2)$$

### Solution3

$$X3 = 1/(2*Ey*Ty-Ey^2+Sy^2-2*Sy*Ty)*(-(2*Ey*Ty-Ey^2+Sy^2-2*Sy*Ty)*(-Ex^2*Sy^2+2*Ex^2*Sy*Ty-Ex^2*Ty^2+Sx^2*Ty^2+2*Ex*Tx*Sy^2-4*Ex*Tx*Sy*Ty+2*Ex*Tx*Ty^2-2*Ey^2*Sx*Tx-Tx^2*Sy^2+2*Tx^2*Sy*Ty+Ey^2*Sx^2-2*Tx^2*Ey*Ty+Tx^2*Ey^2-2*Ey*Ty*Sx^2+4*Ey*Ty*Sx*Tx-2*Sx*Tx*Ty^2))^(1/2)$$

$$Y3 = -1/(-Ex^2+2*Ex*Tx+Sx^2-2*Sx*Tx)*((-Ex^2+2*Ex*Tx+Sx^2-2*Sx*Tx)*(-Ex^2*Sy^2+2*Ex^2*Sy*Ty-Ex^2*Ty^2+Sx^2*Ty^2+2*Ex*Tx*Sy^2-4*Ex*Tx*Sy*Ty+2*Ex*Tx*Ty^2-2*Ey^2*Sx*Tx-Tx^2*Sy^2+2*Tx^2*Sy*Ty+Ey^2*Sx^2-2*Tx^2*Ey*Ty+Tx^2*Ey^2-2*Ey*Ty*Sx^2+4*Ey*Ty*Sx*Tx-2*Sx*Tx*Ty^2))^(1/2)$$

### Solution4

$$X4 = -1/(2*Ey*Ty-Ey^2+Sy^2-2*Sy*Ty)*(-(2*Ey*Ty-Ey^2+Sy^2-2*Sy*Ty)*(-$$

$$\begin{aligned} & \text{Ex}^2 * \text{Sy}^2 + 2 * \text{Ex}^2 * \text{Sy} * \text{Ty} - \text{Ex}^2 * \text{Ty}^2 + \text{Sx}^2 * \text{Ty}^2 + 2 * \text{Ex} * \text{Tx} * \text{Sy}^2 - \\ & 4 * \text{Ex} * \text{Tx} * \text{Sy} * \text{Ty} + 2 * \text{Ex} * \text{Tx} * \text{Ty}^2 - 2 * \text{Ey}^2 * \text{Sx} * \text{Tx} - \\ & \text{Tx}^2 * \text{Sy}^2 + 2 * \text{Tx}^2 * \text{Sy} * \text{Ty} + \text{Ey}^2 * \text{Sx}^2 - 2 * \text{Tx}^2 * \text{Ey} * \text{Ty} + \text{Tx}^2 * \text{Ey}^2 - \\ & 2 * \text{Ey} * \text{Ty} * \text{Sx}^2 + 4 * \text{Ey} * \text{Ty} * \text{Sx} * \text{Tx} - 2 * \text{Sx} * \text{Tx} * \text{Ty}^2))^{(1/2)} \end{aligned}$$

$$\begin{aligned} \text{Y4} = & -1/(-\text{Ex}^2 + 2 * \text{Ex} * \text{Tx} + \text{Sx}^2 - 2 * \text{Sx} * \text{Tx}) * ((-\text{Ex}^2 + 2 * \text{Ex} * \text{Tx} + \text{Sx}^2 - 2 * \text{Sx} * \text{Tx}) * (- \\ & \text{Ex}^2 * \text{Sy}^2 + 2 * \text{Ex}^2 * \text{Sy} * \text{Ty} - \text{Ex}^2 * \text{Ty}^2 + \text{Sx}^2 * \text{Ty}^2 + 2 * \text{Ex} * \text{Tx} * \text{Sy}^2 - \\ & 4 * \text{Ex} * \text{Tx} * \text{Sy} * \text{Ty} + 2 * \text{Ex} * \text{Tx} * \text{Ty}^2 - 2 * \text{Ey}^2 * \text{Sx} * \text{Tx} - \\ & \text{Tx}^2 * \text{Sy}^2 + 2 * \text{Tx}^2 * \text{Sy} * \text{Ty} + \text{Ey}^2 * \text{Sx}^2 - 2 * \text{Tx}^2 * \text{Ey} * \text{Ty} + \text{Tx}^2 * \text{Ey}^2 - \\ & 2 * \text{Ey} * \text{Ty} * \text{Sx}^2 + 4 * \text{Ey} * \text{Ty} * \text{Sx} * \text{Tx} - 2 * \text{Sx} * \text{Tx} * \text{Ty}^2))^{(1/2)} \end{aligned}$$