Przykład:

$$\begin{bmatrix} 2x_k & 8y_k \\ -28x_k & 18 \end{bmatrix} \begin{bmatrix} \delta_{x,k} \\ \delta_{y,k} \end{bmatrix} = - \begin{bmatrix} x_k^2 + 4y_k^2 - 9 \\ 18y_k - 14x_k^2 + 45 \end{bmatrix}$$

$$\begin{bmatrix} x_{k+1} \\ y_{k+1} \end{bmatrix} = \begin{bmatrix} x_k \\ y_k \end{bmatrix} + \begin{bmatrix} \delta_{x,k} \\ \delta_{y,k} \end{bmatrix}$$

$(x_0, y_0) = (1, -1)$

k	x_k	y_k	Error
0	1.0	−1.0	$3.74E-1$
1	1.170212765957447	−1.457446808510638	$8.34E-2$
2	1.202158829506705	−1.376760321923060	$2.68E-3$
3	1.203165807091535	−1.374083486949713	$2.95E-6$
4	1.203166963346410	−1.374080534243534	$3.59E-12$
5	1.203166963347774	−1.374080534239942	$2.22E-16$

Błąd

$$Error = \|\alpha - (x_k, y_k)\| \equiv \text{Max}\{|\xi - x_k|, |\eta - y_k|\}$$