$ORIGIN := 1$

$$x_1 := \begin{pmatrix} 0.2022 \\ 0.4030 \\ 0.6026 \\ 0.8015 \end{pmatrix} \qquad y_1 := \begin{pmatrix} 0.4332 \\ 0.6784 \\ 0.8282 \\ 0.9278 \end{pmatrix} \qquad P := \begin{pmatrix} 3.189 \\ 4.154 \\ 5.097 \\ 6.026 \end{pmatrix}$$

$P_1 := 6.97 \qquad P_2 := 2.261$

$i := 1 .. 4$

$x_{2_i} := 1 - x_{1_i} \qquad y_{2_i} := 1 - y_{1_i}$

$$\gamma_{1_i} := \frac{y_{1_i} \cdot P_i}{x_{1_i} \cdot P_1} \qquad \gamma_{2_i} := \frac{y_{2_i} \cdot P_i}{x_{2_i} \cdot P_2}$$

$$G_i := x_{1_i} \cdot \ln\left(\gamma_{1_i}\right) + x_{2_i} \cdot \ln\left(\gamma_{2_i}\right)$$

$$\gamma_1 = \begin{pmatrix} 0.98 \\ 1.003 \\ 1.005 \\ 1.001 \end{pmatrix} \qquad \gamma_2 = \begin{pmatrix} 1.002 \\ 0.99 \\ 0.975 \\ 0.969 \end{pmatrix} \qquad G = \begin{pmatrix} -2.403 \times 10^{-3} \\ -4.863 \times 10^{-3} \\ -7.204 \times 10^{-3} \\ -5.527 \times 10^{-3} \end{pmatrix}$$

$$A_i := \frac{G_i}{x_{1_i} \cdot x_{2_i}}$$

$$A = \begin{pmatrix} -0.015 \\ -0.02 \\ -0.03 \\ -0.035 \end{pmatrix}$$

Alternative Solution

$$A := \frac{\sum_i \left(G_i \cdot x_{1_i} \cdot x_{2_i}\right)}{\left[\sum_i \left(x_{1_i} \cdot x_{2_i}\right)^2\right]} = -0.025$$