

Câu 1. $\Delta a^* = |a|\delta_a + |a - a^*|, \quad \uparrow$

Câu 2. $k \geq \log(2|a|\delta_a), \quad k \in \mathbb{Z}$

Câu 3. $\Delta_f = |f'_x|\Delta_x + |f'_y|\Delta_y, \quad \uparrow$

Câu 4. $m = \min_{x \in [a, b]} |f'(x)|, \quad \Delta x^* = \frac{|f(x^*)|}{m}, \quad \uparrow$

Câu 5. $f(X), \text{ xét dấu } f(x_i), \quad \rightarrow$

Câu 6. $q = \max_{x \in [a, b]} |g'(x)| \quad \text{STO} \quad A, n \geq \frac{\ln \frac{(1-A)10^{-10}}{|g(x_0) - x_0|}}{\ln A}, \quad n \in \mathbb{N}$

Câu 7. $Y = g(X) : |Y - X| : X = Y : D = D + 1$

Câu 8. $q = \max_{x \in [a, b]} |g'(x)|, \quad \Delta x_2 = \frac{A^2}{1-A} |g(x_0) - x_0|, \quad \uparrow$

Câu 9. $X = X - \frac{f(X)}{f'(X)}, \quad \rightarrow$

Câu 10. $m = \min_{x \in [a, b]} |f'(x)|, \quad \begin{cases} f(a)f''(a) > 0, \rightarrow x_0 = a \\ f(a)f''(a) < 0, \rightarrow x_0 = b \end{cases}$

$$X = X - \frac{f(X)}{f'(X)} : \frac{|f(X)|}{m}, \quad \uparrow$$

Câu 11. $\text{tr}(U) = D_1 + \frac{D_2}{D_1} + \frac{D_3}{D_2}, \rightarrow$

Câu 12. $B_{32} = \frac{A_{32}}{\sqrt{D_1 D_2}}, A_{32}$ là định thức bỏ đi dòng 3 cột 2 của A \rightarrow

Câu 13. $\alpha > \frac{a_{21}a_{12}}{a_{11}},$ hoặc $\begin{vmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & \alpha & a_{23} \\ a_{31} & a_{32} & a_{33} \end{vmatrix} > 0, \downarrow$

Câu 14. $k_\infty(A) = \|A\|_\infty \|A^{-1}\|_\infty, \uparrow$

TÀI LIỆU SƯU TẬP

BỞI HCMUT-CNCP

Câu 15,16,17,18,19,20.

$$\begin{cases} a_{11}x_1 + a_{12}x_2 = b_1 \\ a_{21}x_1 + a_{22}x_2 = b_2 \end{cases}$$

Câu 15.

$$X = (b_1 - a_{12}B) \div a_{11} : Y = (b_2 - a_{21}A) \div a_{22} :$$

$$|X - A| : |Y - B| : A = X : B = Y$$

$$\|T_j\|_{\infty} = \max\left\{\left|\frac{a_{12}}{a_{11}}\right|, \left|\frac{a_{21}}{a_{22}}\right|\right\}$$

$$\Delta x^{(2)} = \frac{\|T_j\|_{\infty}}{1 - \|T_j\|_{\infty}} \|x^{(2)} - x^{(1)}\|_{\infty}, \quad \uparrow$$

Câu 16.

$$X = (b_1 - a_{12}B) \div a_{11} : Y = (b_2 - a_{21}A) \div a_{22} :$$

$$|X - A| : |Y - B| : A = X : B = Y : D = D + 1$$

Câu 17. $X = (b_1 - a_{12}B) \div a_{11} : B = (b_2 - a_{21}A) \div a_{22} : A = X,$

Câu 18.

$$X = (b_1 - a_{12}B) \div a_{11} : Y = (b_2 - a_{21}X) \div a_{22} :$$

$$|X - A| : |Y - B|$$

$$\|T_g\|_{\infty} = \left| \frac{a_{12}}{a_{11}} \right|$$

$$\Delta_X^{(2)} = \frac{\|T_g\|_{\infty}^2}{1 - \|T_g\|_{\infty}} \|x^{(1)} - x^{(0)}\|_{\infty}, \quad \uparrow$$

Câu 19.

$$X = (b_1 - a_{12}B) \div a_{11} : Y = (b_2 - a_{21}X) \div a_{22} :$$

$$|X - A| + |Y - B| : A = X : B = Y : D = D + 1$$

Câu 20. $A = (b_1 - a_{12}B) \div a_{11} : B = (b_2 - a_{21}A) \div a_{22}, \quad \rightarrow$