

بيان الترخيص



$$(x - 1,03)(x - 1,06) \Rightarrow x^2 - 2,09x + 2,08$$

$$(x - 1,09)(x - 2,02) \Rightarrow x^2 - 4,1x + 4,18$$

$$\begin{array}{r} x^4 - 4,1x^3 - 418x^2 - 12,122x + 8,6944 \\ - 2,09x^3 11,89x^2 - 8,528x \\ \hline 2,08x^2 \end{array}$$

$$L_{(4,0)}(x) = 5,144032922 * (x^4 - 7x^3 + 1815x^2 - 20,65x + 8,6944)$$

$$5,144032922x^4 - 36,00823045x^3 +$$

$$93,36419753x^2 - 106,92242798x + 44,72427984$$

$$(x - 1,09)(x - 2,02) \Rightarrow x^2 - 4,1x + 4,18$$

$$(x - 1)(x - 1,06) \Rightarrow x^2 - 2,06x + 1,06 +$$

$$\begin{array}{r} + 4,18x^2 - 10,868x + 6,688 \\ - 4,1x^3 + 10,66x^2 - 6,56x \\ \hline x^4 - 2,6x^3 + 1,6x^2 \end{array}$$

جزء اول



المركز العربي للإعلام الإلكتروني

ARAB CENTER FOR ELECTRONIC MEDIA

$$L(x) = -20,57613169 * (x^4 - 6,7x^3 + 16,244x^2 - \\ (4,1) \quad 17,428x + 6,688)$$

$$-20,57613169x^4 + 137,8600823x^3$$

$$+ -338,2716049x^2$$

$$\underline{358,600823x - 137,613168x}$$

$$(x-1,9)(x-2,2) \Rightarrow x^2 - 4,1x + 4,18$$

$$(x-1)(x-1,3) \Rightarrow x^2 - 2,3x + 1,3$$

$$+ 1,3x^2 - 5,33x + 5,434$$

$$- 2,3x^3 + 9,43x^2 - 9,614x$$

$$x^4 - 4,1x^3 + 4,18x^2$$

$$L(x) = 30,86419753 \Rightarrow (x^4 - 6,4x^3 + 14,19x^2 - \\ (4,2) \quad 14,944x + 5,434)$$

$$30,86419753x^4 - 197,5308642x^3 +$$

$$460,1851852x^2$$

$$- 461,2345679x + 167,7160494$$



لجن المخواكي



$$L(x) = 5.144032922 *$$

$$(x^4 - 5.8x^3 + 12.39x^2 - 11.542x + 8.952)$$

$$5.144032922x^4 - 29.83539095x^3 +$$

$$63.7345679x^2 - 59.37242798x$$

$$+ 20.32921811$$



برن التوابي



المركز العربي للإعلام الإلكتروني

ARAB CENTER FOR ELECTRONIC MEDIA

$$L(x) = \\ (4,3)$$

$$(x-1)(x-1,3) \Rightarrow x^2 - 2,3x + 1,3$$
$$(x-1,6)(x-2,2)x^2 - 3,8x + 3,5$$

$$\begin{array}{r} +3,52x^2 - 8,596x + 4,576 \\ .4 - 3,8x^2 + 8,74x^2 - 4,94x \\ \hline x - 2,3x^3 + 1,3x^2 \end{array}$$

$$L(x) = -20,57613169 * (x^4 - 6,1x^3 + 13,56x^2 - 13,036x + 4,576)$$
$$= -20,57613169x^4 + 125,5144033x^3 - 279,0123457x^2$$
$$+ 268,2304527x - 94,1563786$$



لجزء المركب



المركز العربي للإعلام الإلكتروني
ARAB CENTER FOR ELECTRONIC MEDIA

$$P(x) = \frac{1101}{1000} + \frac{2001}{500}x + \frac{4001}{1000}x^2 + x^3$$

$$P'(-1/3) = 1.668$$

$$P(-1/3) = 589/3375$$

$$\begin{array}{r} L_{9,4}(x) \quad (x-1)(x-13) \rightarrow x^2 - 2.3x + 1.3 \\ (x-1.6)(x-1.9) \rightarrow x^2 - 3.5x + 3.0 \\ \hline 4.04x^2 - 6.992x + 3.952 \\ -3.5x^3 + 8.05x^2 - 4.53x \\ \hline x^4 - 2.3x^3 - 1.3x^2 \end{array}$$



بيان المحتوى



المركز العربي للإعلام الإلكتروني

$$\left[\begin{array}{cccc|c} 1 & -3/4 & 9/16 & -27/64 & -1149/16000 \\ 1 & -1/2 & 1/4 & -1/8 & -99/4000 \\ 1 & -1/4 & 1/16 & -1/64 & 5359/16000 \\ 1 & 0 & 0 & 0 & 1101/1000 \end{array} \right]$$

$$r_4 \rightarrow -r_1 + r_4$$

$$r_3 \rightarrow -r_1 + r_3$$

$$r_2 \rightarrow -r_1 + r_2$$

$$\left[\begin{array}{cccc|c} 1 & -3/4 & 9/16 & -27/64 & -1149/16000 \\ 0 & 1/4 & -5/16 & 19/64 & 753/16000 \\ 0 & 1/2 & -1/2 & 13/32 & 1627/4000 \\ 0 & 3/4 & -9/16 & 27/64 & 3753/3200 \end{array} \right] \quad r_2 \rightarrow 4r_2$$

$$\left[\begin{array}{cccc|c} 1 & -3/4 & 9/16 & -27/64 & -1149/16000 \\ 0 & 1 & -5/4 & 19/16 & 753/4000 \\ 0 & 1/2 & -1/2 & 13/32 & 1627/4000 \\ 0 & 3/4 & -9/16 & 27/64 & 3753/3200 \end{array} \right] \quad r_4 \rightarrow -\frac{3}{4}r_2 + r_4$$

$$r_3 \rightarrow -\frac{1}{2}r_2 + r_3$$



نحو المذيع



$$\left[\begin{array}{cccc|c} 1 & -3/4 & 9/16 & -27/84 & -1149 \\ 0 & 1 & -5/4 & 19/16 & 16000 \\ 0 & 0 & 1/8 & -3/16 & 753 \\ 0 & 0 & 3/16 & -15/82 & 4000 \\ & & & & 2501 \\ & & & & 8000 \\ & & & & 8253 \\ & & & & 8000 \end{array} \right] \quad f_3 \rightarrow 8f_3$$

$$\left[\begin{array}{cccc|c} 1 & -3/4 & 9/16 & -27/84 & -1149 \\ 0 & 1 & -5/4 & 19/16 & 16000 \\ 0 & 0 & 1 & -3/2 & 753 \\ 0 & 0 & 3/8 & -15/32 & 4000 \\ & & & & 2501 \\ & & & & 1000 \\ & & & & 8253 \\ & & & & 8000 \end{array} \right] \quad f_4 \rightarrow \frac{3}{8}f_3 + f_4$$

$$\left[\begin{array}{cccc|c} 1 & -3/4 & 9/16 & -27/84 & -1149/16000 \\ 0 & 1 & -5/4 & 19/16 & 753/4000 \\ 0 & 0 & 1 & -3/2 & 2501/1000 \\ 0 & 0 & 0 & 3/32 & 3/32 \end{array} \right]$$

f₄ → 32f₃f₄



جزء المذكرة



$$\left[\begin{array}{cccc|c} 1 & -3/4 & 9/16 & -27/64 & -1144/16000 \\ 0 & 1 & -5/4 & 19/16 & 753/4000 \\ 0 & 0 & 1 & -3/2 & 2501/1000 \\ 0 & 0 & 0 & 1 & 1 \end{array} \right]$$

$$a_3 = 1$$

$$a_2 - 3/2 * 1 = 250/1000 \Rightarrow a_2 = 400/1000$$

$$a_1 - 5/4 * 400/1000 - 3/2 * 1 = 753/4000$$

$$a_1 = 2001/500$$

$$a_0 = 3/2 * 2001/500 + 19/16 * 400/1000 - \frac{27}{64}$$

$$a_0 = 1101/1000$$