

 $\sum_{\alpha} A_{\alpha} A_{\beta}$ D.J. q

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Abstract. We consider a monic polynomial of X bolic coefficients. We give a method for X and X and X coefficients (regarded as parameters) that is a lower bound on the minimum will necessarily require parametric representations of algebraic \blacksquare , at \blacksquare are much simpler. In principal much simpl X the method X to X for X at X for X for a t X a ; \bigwedge^{\bullet} tx a \bigwedge^{\bullet} a \bigwedge^{\bullet} a \bigwedge^{\bullet} a. As an and X , we compute \mathbb{R} and \mathbb{R} and \mathbb{R} for a $f(x) = f(x) - f(x)$ in the trigonometric functions $f(x) = f(x) - f(x)$ $X \setminus K$ are positive definite.

1 I \cdot μ Z = λ , λ \rightarrow μ R 0,..., $n-1$, λ = λ , $n\lambda$, λ , λ , λ $n(\lambda) = \lambda^n$ n−1 $j=0$ $j^{\mathfrak{a}}$. () $A \circ \mathcal{D} = (f) \circ \mathcal{D} = \mathcal{D}$ is a lower bound for $\mathcal{D} = \mathcal{D}$ is a lower bound for P

 \mathbb{R} i.e., L must satisfy $\left(\begin{array}{c} \uparrow \\ \downarrow \end{array}\right)_{\bullet} n(\uparrow) = \left(\begin{array}{c} \downarrow \\ j \end{array}\right)$. (2) T dhe hand definition definition does not require that the equality in \mathcal{A}_k τ_{α} is also then \mathcal{A} if τ_{β} is also use up to \mathcal{A}

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\mathbf{A}_{\mathbf{A}} \mathbf{A}_{\mathbf{B}} \mathbf{A}_{\mathbf{C}} \mathbf{A}_{\mathbf{D}} \mathbf{
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 $>$ minimize(x[^]4 - 5^{*}x[^]2 + 4^{*}x , x); RootOf(2 _Z^3 - 5 _Z - 2,index=3)^4 - 5*RootOf(2 _Z^3 - 5 _Z - 2,index=3)^2 + 4 RootOf(2 _Z^3 - 5 _Z - 2,index=3) ψ and ψ is ψ is ψ is ψ is ψ $-(5/2)$ RootOf(2 Z^3-5 $Z-2$, index=3)^2 $-$ 3 RootOf(2 Z^3-5 $Z-2$, index=3) \Box on α in herootOf selects, using an index, the angle α $\frac{1}{2}$ **2 L B** $\mathbb{P}\setminus\mathcal{H}=\mathcal{A}\cup\mathcal{A}$ is could be used to find be use η_{B} the minimum of a parametric polynomial, and indeed we show that η_{B} p q p q $\frac{1}{2}$ q $\frac{1}{2}$ $\mathcal{L}^{\mathcal{A}}$ and $\mathcal{L}^{\mathcal{A}}$, $\mathcal{L}^{\mathcal{A}}$ and \math in terms of that for ^Pⁿ−². This recursive descent terminates at ^P2, for which we have the result (7). The descent is based on the following obvious lemma. Lemma 1. If (x) and (x) are two even-degree monic polynomials, then $\mathcal{F}_{\mathbf{a}}(\mathbf{r}) = \mathbf{r}(\mathbf{r})$, $\mathcal{F}_{\mathbf{a}}(\mathbf{r}) = \mathbf{r}(\mathbf{r})$ $Proof:$ \Box equality holds when Λ is and are realized at the minima of and are realized at the same realized at the $\mathfrak{g}_{\mathbb{R}}$ $\mathfrak{p}_{\mathbb{C}}$ $\mathfrak{p}_{\mathbb{R}}$ $\mathfrak{p}_{\mathbb{C}}$ $\mathfrak{p}_{\mathbb{C$ I is point of this point to acknowledge the evening the degree by I is a convenient of the degree by I $\mathbf{Q}_\mathbf{p}$ and $\mathbf{Q}_\mathbf{p}$ apply to consider $\mathbf{Q}_\mathbf{p}$ apply the standard by using the standard $\mathbf{Q}_\mathbf{p}$ $\sum_{i=1}^{n}$ $\int_{\mathbb{R}}^{n}$ $\int_{\mathbb{R}}^{n}$ = $-\int_{\mathbb{R}}^{2n-1} \int_{\mathbb{R}}^{2n} \int_{\mathbb{R}}^{2n}$ from $\int_{\mathbb{R}}^{n}$ from P_{2n}(i). \bullet 2n() = 2n 2n 2n−2 $j=0$ ^j ^j $()$ $N_{\rm{c}}$ into the split P2n into two even-degree polynomials with polynomials with polynomials with polynomials with polynomials P c^h_1 introducing a parameter n satisfying n c^h and $n - 2n - 2$. \bullet 2n = $2n \begin{pmatrix} 2n & 2n-2 & n \end{pmatrix}$ $2n-2 \begin{pmatrix} 2n-2 & n-2 \end{pmatrix}$... = \bullet 2n \bullet 2n \bullet $\begin{array}{ccc} \blacksquare & \blacksquare \\ \blacksquare & \blacksquare \\ \end{array}$ $\phi_{\alpha}(n) = -\frac{(n-1)^{n-1}(n-2n-2)^n}{n^{\frac{n-1}{2n}}}$ φ η $\zeta = \zeta$ is φ φ $\zeta = \zeta$ ζ ζ

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\frac{1}{2} \int_{\mathbb{R}^3} \int_{\mathbb{R}^3} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2n} \right) \frac{1}{(2n-1)^{n}} \, dx \quad \text{and} \quad \frac{1}{2} \int_{\mathbb{R}^3} \left(\frac{2}{2
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\frac{1}{3} \int_{3}^{1} \int_{1}^{q_{\frac{1}{3}}q_{\frac{3}{3}}q_{\frac{3}{3}}q_{\frac{3}{3}}q_{\frac{3}{3}}q_{\frac{3}{3}}^{3}} \int_{\frac{q_{\frac{1}{3}}q
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 \mathbb{R} Massume(a, positive), $\mathbf{L} = \mathbf{A}$, $\mathbf{L} = \mathbf{A}$

24251 + 24628 3456(5 + 4) . Notice that since a > 0, the denominator is never zero. We can quickly check the accuracy of this bound by trying a numerical comparison. Thus for = 10, the bound takes the value 30059/17280 1.7395, while the minimum value is actually 1.9771. For large, positive, the minimum is asymptotically 2 and the bound is asymptotically 6157/3456 1.78, so in this case the asymptotic behaviour is good.

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= \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{j=1}^{
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\begin{pmatrix}\n\ddot{\mathbf{r}} \\
\mathbf{r} \\
\mathbf{r}\n\end{pmatrix} = \frac{(\partial_1^1 \mathbf{r}^2 - \mathbf{r}^3)^{-2} (\partial_1^1 \mathbf{r}^2 - \mathbf{r}^3)^{-2} (\partial_1^1 \mathbf{r}^2 - \mathbf{r}^3)^{-2} (\partial_1^1 \mathbf{r}^3 - \math
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\int_{\frac{1}{2}}^{\frac{1}{2}} e^{-\frac{1}{2}} e^{-\frac{1}{2}(\frac{1}{2})\theta - \frac{1}{2}} e^{-\frac{1}{2}(\frac{1}{2})\theta} d\theta = \int_{\frac{1}{2}}^{\frac{1}{2}} e^{-\frac{1}{2}(\frac{1}{2})\theta} \int_{\frac{1}{2}}^{\frac{1}{2}} e^{-\frac{1}{2}(\frac{1}{2})\theta} e^{-\frac{1}{2}(\frac{1}{2})\theta} d\theta = \int_{\frac{1}{2}}^{\frac{1}{2}} e^{-\frac{1}{2}(\frac{1}{2})\theta} d\theta = \int_{\frac{1}{2}}^{\frac{1}{2}} e^{-\frac{1}{2}(\frac{1}{2})\theta} e^{-\frac{1}{2}(\frac{1}{2})\theta} d\theta = \int_{\frac{1}{2}}^{\frac{1}{2}} e^{-\frac{1}{2}(\frac{1}{2})\
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1. Bank, B., Guddat, K., K., K., K., Kummer, B., Tammer, K.: Non-linning at X, B, K