following lower bounds for $\bar{x}$ and $\phi(\bar{x})$: (I) 10^{458}; (II) 10^{586}; (III) 10^{400}.

References

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ON THE DARBOUX TANGENTS

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1. **Introduction.** In a recent paper [1][1] Abramescu gave a metrical characterization of the cubic curve obtained by equating to zero the terms of the expansion of a surface S at an ordinary point O_1, up to and including the terms of the third order. This cubic curve is rational and its inflexions lie on the three tangents of Darboux through O_1. In this paper we give a projective characterization of such a curve, and hence a new derivation of the tangents of Darboux. By using the method employed in this characterization to the curve of intersection of the tangent plane of the surface at O_1 with S, a simple characterization of the second edge of Green is found. Another application exhibits the correspondence of Moutard. Finally a new interpretation of the reciprocal of the projective normal is given in terms of the conditions of apolarity of a cubic form to a quartic form. The canonical tangent appears in a similar fashion.

Let S be referred to its asymptotic curves, and let the coordinates (x^1, x^2, x^3, x^4) of the generic point O_1 of S be normalized so that they satisfy the system [2] of differential equations

$$
\begin{aligned}
x_{uu} &= \theta_u x_u + \beta x_v + px, \\
x_{vv} &= \gamma x_u + \theta_v x_v + qx, \qquad \theta = \log R.
\end{aligned}
\tag{1.1}
$$

The line l_1 joining O_1 to O_4, whose coordinates are x^i_{uv}, is the R-conjugate line, and the line l_2 determined by O_2, O_3, whose respective coordinates are x^i_u, x^i_v, is the R-harmonic line.

If we define the local coordinates (x_1, x_2, x_3, x_4) with respect to

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[1] Numbers in brackets refer to the references cited at the end of the paper.