

REAL FORMS OF SOME GIZATULLIN SURFACES AND KORAS–RUSSELL THREEFOLDS

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Abstract: We describe the real forms of Gizatullin surfaces of the form $xy = p(z)$ and of Koras–Russell threefolds of the first kind. The former admit zero, two, three, four, or six isomorphism classes of real forms, depending on the degree and the symmetries of the polynomial p . The latter, which are threefolds given by an equation of the form $x^d y + z^k + x + t^\ell = 0$, all admit exactly one real form up to isomorphism.

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