ON SKEW-SYMMETRIC MATRICES RELATED TO
THE VECTOR CROSS PRODUCT IN $\mathbb{R}^7$ *

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Abstract. A study of real skew-symmetric matrices of orders 7 and 8, defined through the vector cross product in $\mathbb{R}^7$, is presented. More concretely, results on matrix properties, eigenvalues, (generalized) inverses and rotation matrices are established.

Key words. Vector cross product, Skew-symmetric matrix, Matrix properties, Eigenvalues, (Generalized) Inverses, Rotation matrices.

AMS subject classifications. 15A72, 15B57, 15A18, 15A09, 15B10.

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