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Arne Ledet* (arne.ledet@ttu.edu). *Generic polynomials for quaternion groups*. Preliminary report.

The known construction of a generic polynomial for the quaternion group Q_8 over \mathbb{Q} is generalised to produce generic polynomials for larger quaternion groups over fields containing appropriate ‘cosines’, such as \mathbb{R} . Since Q_{16} is known to *not* have a generic polynomial over \mathbb{Q} , these ‘cosines’ are necessary. In the case of Q_{16} , we get a generic polynomial over $\mathbb{Q}(\sqrt{2})$. (Received February 10, 2014)