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The set of (projective) codewords of minimum weight of any linear code can be viewed as a zero-dimensional projective variety of defining ideal I . It turns out that I is the saturation of a simpler ideal J , which is generated by products of linear forms. With this in mind we obtain characterizations of classical notions in coding theory using algebraic geometry: a linear code is MDS iff $I = J$; or the number of (projective) codewords of minimum weight equals the Hilbert polynomial of R/J . The projective codewords of minimum weight have a nice geometric interpretation related to “the fitting problem”. I will discuss about this as well, and about three computational methods (coming from algebraic geometry) to find these particular codewords. (Received February 11, 2012)