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Quadratic forms representing all integers coprime to 3.

We prove that a positive-definite quadratic form with integer coefficients represents all positive-integers coprime to 3 if and only if it represents the integers in $\{1, 2, 5, 7, 10, 11, 13, 14, 17, 19, 22, 23, 26, 29, 31, 34, 35, 37, 38, 46, 47, 55, 58, 62, 70, 94, 110, 119, 145, 203, 290\}$. This result is similar to the 290-theorem of Bhargava and Hanke, and the proof uses results about ternary quadratic forms, and properties of modular forms and the Petersson inner product. (Received September 19, 2016)