MR0156819 (28 63) 10.16 10.45

Timofeev, V. N.

On positive quadratic forms representing the same numbers. (Russian)  $\,$ 

Uspehi Mat. Nauk 18 1963 no. 4 (112) 191-193

It was shown by Delaunay (B. N. Delone) [Zap. Rossiïsk. Mineralog. Obšč. (1926), and Uspehi Mat. Nauk 4 (1938), 102–164] that if two inequivalent definite integral quadratic forms in two variables represent precisely the same set of integers for integer values of the variables, then they must be equivalent to  $a(x^2 + xy + y^2)$  and  $a(x^2 + 3y^2)$  for some integer a. By elementary means the author constructs sets of inequivalent definite ternary integral forms which represent precisely the same integers. One set contains four members.

J. W. S. Cassels