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D(-1)-triples of the form \{1, b, c\} in the ring \(\mathbb{Z}[\sqrt{-t}]\), \(t>0\)


**Abstract.** In this paper, we study D(-1)-triples of the form \{1, b, c\} in the ring \(\mathbb{Z}[\sqrt{-t}]\), \(t>0\), for positive integer \(b\) such that \(b\) is a prime, twice prime and twice prime squared. We prove that in those cases \(c\) has to be an integer. In cases of \(b=26, 37\) or \(50\) we prove that D(-1)-triples of the form \{1, b, c\} cannot be extended to a D(-1)-quadruple in the ring \(\mathbb{Z}[\sqrt{-t}]\), \(t>0\), except in cases \(t\) in \\{1, 4, 9, 25, 36, 49\}. For those exceptional cases of \(t\) we show that there exist infinitely many D(-1)-quadruples of the form \{1, b, -c, d\}, \(c, d>0\) in \(\mathbb{Z}[\sqrt{-t}]\).