Matrix chosen: [[317, -39], [-40, 5]] for number (623866948, 4247233419)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]]), (b^-2, a^1, [[34, 39], [-5, -5]])]

Matrix chosen: [[77, -39], [2, -1]] for number (24690863, -3094643877)

Matrix list sorted by distance from 0: [(b^10, a^10, [[391, 39], [10, 1]]), (b^10, a^9, [[352, 39], [9, 1]]), (b^10, a^8, [[313, 39], [8, 1]]), (b^10, a^7, [[274, 39], [7, 1]]), (b^10, a^6, [[235, 39], [6, 1]]), (b^10, a^5, [[196, 39], [5, 1]]), (b^10, a^4, [[157, 39], [4, 1]]), (b^10, a^3, [[118, 39], [3, 1]]), (b^10, a^2, [[79, 39], [2, 1]]), (b^10, a^1, [[40, 39], [1, 1]]), (b^10, a^-1, [[38, -39], [1, -1]]), (b^10, a^-2, [[77, -39], [2, -1]]), (b^10, a^-3, [[116, -39], [3, -1]]), (b^10, a^-4, [[155, -39], [4, -1]]), (b^10, a^-5, [[194, -39], [5, -1]]), (b^10, a^-6, [[233, -39], [6, -1]]), (b^10, a^-7, [[272, -39], [7, -1]]), (b^10, a^-8, [[311, -39], [8, -1]]), (b^10, a^-9, [[350, -39], [9, -1]]), (b^10, a^-10, [[389, -39], [10, -1]])]

Matrix chosen: [[40, 39], [1, 1]] for number (24690863, -2131700220)

Matrix list sorted by distance from 0: [(b^10, a^10, [[391, 39], [10, 1]]), (b^10, a^9, [[352, 39], [9, 1]]), (b^10, a^8, [[313, 39], [8, 1]]), (b^10, a^7, [[274, 39], [7, 1]]), (b^10, a^6, [[235, 39], [6, 1]]), (b^10, a^5, [[196, 39], [5, 1]]), (b^10, a^4, [[157, 39], [4, 1]]), (b^10, a^3, [[118, 39], [3, 1]]), (b^10, a^2, [[79, 39], [2, 1]]), (b^10, a^1, [[40, 39], [1, 1]]), (b^10, a^-1, [[38, -39], [1, -1]]), (b^10, a^-2, [[77, -39], [2, -1]]), (b^10, a^-3, [[116, -39], [3, -1]]), (b^10, a^-4, [[155, -39], [4, -1]]), (b^10, a^-5, [[194, -39], [5, -1]]), (b^10, a^-6, [[233, -39], [6, -1]]), (b^10, a^-7, [[272, -39], [7, -1]]), (b^10, a^-8, [[311, -39], [8, -1]]), (b^10, a^-9, [[350, -39], [9, -1]]), (b^10, a^-10, [[389, -39], [10, -1]])]

Matrix chosen: [[391, 39], [10, 1]] for number (24690863, -1168756563)

Matrix list sorted by distance from 0: [(b^10, a^10, [[391, 39], [10, 1]]), (b^10, a^9, [[352, 39], [9, 1]]), (b^10, a^8, [[313, 39], [8, 1]]), (b^10, a^7, [[274, 39], [7, 1]]), (b^10, a^6, [[235, 39], [6, 1]]), (b^10, a^5, [[196, 39], [5, 1]]), (b^10, a^4, [[157, 39], [4, 1]]), (b^10, a^3, [[118, 39], [3, 1]]), (b^10, a^2, [[79, 39], [2, 1]]), (b^10, a^1, [[40, 39], [1, 1]]), (b^10, a^-1, [[38, -39], [1, -1]]), (b^10, a^-2, [[77, -39], [2, -1]]), (b^10, a^-3, [[116, -39], [3, -1]]), (b^10, a^-4, [[155, -39], [4, -1]]), (b^10, a^-5, [[194, -39], [5, -1]]), (b^10, a^-6, [[233, -39], [6, -1]]), (b^10, a^-7, [[272, -39], [7, -1]]), (b^10, a^-8, [[311, -39], [8, -1]]), (b^10, a^-9, [[350, -39], [9, -1]]), (b^10, a^-10, [[389, -39], [10, -1]])]

Matrix chosen: [[112, -39], [15, -5]] for number (24690863, -205812906)

Matrix list sorted by distance from 0: [(b^2, a^10, [[395, 39], [50, 5]]), (b^2, a^9, [[356, 39], [45, 5]]), (b^2, a^8, [[317, 39], [40, 5]]), (b^2, a^7, [[278, 39], [35, 5]]), (b^2, a^6, [[239, 39], [30, 5]]), (b^2, a^5, [[200, 39], [25, 5]]), (b^2, a^4, [[161, 39], [20, 5]]), (b^2, a^3, [[122, 39], [15, 5]]), (b^2, a^2, [[83, 39], [10, 5]]), (b^2, a^1, [[44, 39], [5, 5]]), (b^2, a^-1, [[34, -39], [5, -5]]), (b^2, a^-2, [[73, -39], [10, -5]]), (b^2, a^-3, [[112, -39], [15, -5]]), (b^2, a^-4, [[151, -39], [20, -5]]), (b^2, a^-5, [[190, -39], [25, -5]]), (b^2, a^-6, [[229, -39], [30, -5]]), (b^2, a^-7, [[268, -39], [35, -5]]), (b^2, a^-8, [[307, -39], [40, -5]]), (b^2, a^-9, [[346, -39], [45, -5]]), (b^2, a^-10, [[385, -39], [50, -5]])]

Matrix chosen: [[239, -39], [-30, 5]] for number (8787431, 66120873)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]])]

Matrix chosen: [[1180, -117], [-100, 10]] for number (425647928, 5432039769)

Matrix list sorted by distance from 0: [(b^-3, a^10, [[1160, 117], [-100, -10]]), (b^-3, a^9, [[1043, 117], [-90, -10]]), (b^-3, a^8, [[926, 117], [-80, -10]]), (b^-3, a^7, [[809, 117], [-70, -10]]), (b^-3, a^6, [[692, 117], [-60, -10]]), (b^-3, a^5, [[575, 117], [-50, -10]]), (b^-3, a^4, [[458, 117], [-40, -10]]), (b^-3, a^3, [[341, 117], [-30, -10]]), (b^-3, a^2, [[224, 117], [-20, -10]]), (b^-3, a^1, [[107, 117], [-10, -10]]), (b^-3, a^-2, [[244, -117], [-20, 10]]), (b^-3, a^-3, [[361, -117], [-30, 10]]), (b^-3, a^-4, [[478, -117], [-40, 10]]), (b^-3, a^-5, [[595, -117], [-50, 10]]), (b^-3, a^-6, [[712, -117], [-60, 10]]), (b^-3, a^-7, [[829, -117], [-70, 10]]), (b^-3, a^-8, [[946, -117], [-80, 10]]), (b^-3, a^-9, [[1063, -117], [-90, 10]]), (b^-3, a^-10, [[1180, -117], [-100, 10]]), (b^-3, a^-1, [[127, -117], [-10, 10]])]

Matrix chosen: [[80, 39], [4, 2]] for number (131555417, -2259795057)

Matrix list sorted by distance from 0: [(b^5, a^10, [[392, 39], [20, 2]]), (b^5, a^9, [[353, 39], [18, 2]]), (b^5, a^8, [[314, 39], [16, 2]]), (b^5, a^7, [[275, 39], [14, 2]]), (b^5, a^6, [[236, 39], [12, 2]]), (b^5, a^5, [[197, 39], [10, 2]]), (b^5, a^4, [[158, 39], [8, 2]]), (b^5, a^3, [[119, 39], [6, 2]]), (b^5, a^2, [[80, 39], [4, 2]]), (b^5, a^1, [[41, 39], [2, 2]]), (b^5, a^-1, [[37, -39], [2, -2]]), (b^5, a^-2, [[76, -39], [4, -2]]), (b^5, a^-3, [[115, -39], [6, -2]]), (b^5, a^-4, [[154, -39], [8, -2]]), (b^5, a^-5, [[193, -39], [10, -2]]), (b^5, a^-6, [[232, -39], [12, -2]]), (b^5, a^-7, [[271, -39], [14, -2]]), (b^5, a^-8, [[310, -39], [16, -2]]), (b^5, a^-9, [[349, -39], [18, -2]]), (b^5, a^-10, [[388, -39], [20, -2]])]

Matrix chosen: [[239, -39], [-30, 5]] for number (159966739, 1109655924)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]]), (b^-2, a^1, [[34, 39], [-5, -5]])]

Matrix chosen: [[395, -39], [-50, 5]] for number (681214865029, 6130000379919)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]]), (b^-2, a^-1, [[44, -39], [-5, 5]])]

Matrix chosen: [[310, 39], [-16, -2]] for number (227455140299189, 3567666499064499)

Matrix list sorted by distance from 0: [(b^-5, a^10, [[388, 39], [-20, -2]]), (b^-5, a^9, [[349, 39], [-18, -2]]), (b^-5, a^8, [[310, 39], [-16, -2]]), (b^-5, a^7, [[271, 39], [-14, -2]]), (b^-5, a^6, [[232, 39], [-12, -2]]), (b^-5, a^5, [[193, 39], [-10, -2]]), (b^-5, a^4, [[154, 39], [-8, -2]]), (b^-5, a^3, [[115, 39], [-6, -2]]), (b^-5, a^2, [[76, 39], [-4, -2]]), (b^-5, a^1, [[37, 39], [-2, -2]]), (b^-5, a^-1, [[41, -39], [-2, 2]]), (b^-5, a^-2, [[80, -39], [-4, 2]]), (b^-5, a^-3, [[119, -39], [-6, 2]]), (b^-5, a^-4, [[158, -39], [-8, 2]]), (b^-5, a^-5, [[197, -39], [-10, 2]]), (b^-5, a^-6, [[236, -39], [-12, 2]]), (b^-5, a^-7, [[275, -39], [-14, 2]]), (b^-5, a^-8, [[314, -39], [-16, 2]]), (b^-5, a^-9, [[353, -39], [-18, 2]]), (b^-5, a^-10, [[392, -39], [-20, 2]])]

Matrix chosen: [[68, -39], [20, -10]] for number (454910280598378, -1735417473539373)

Matrix list sorted by distance from 0: [(b^1, a^10, [[400, 39], [100, 10]]), (b^1, a^9, [[361, 39], [90, 10]]), (b^1, a^8, [[322, 39], [80, 10]]), (b^1, a^7, [[283, 39], [70, 10]]), (b^1, a^6, [[244, 39], [60, 10]]), (b^1, a^5, [[205, 39], [50, 10]]), (b^1, a^4, [[166, 39], [40, 10]]), (b^1, a^3, [[127, 39], [30, 10]]), (b^1, a^2, [[88, 39], [20, 10]]), (b^1, a^1, [[49, 39], [10, 10]]), (b^1, a^-1, [[29, -39], [10, -10]]), (b^1, a^-2, [[68, -39], [20, -10]]), (b^1, a^-3, [[107, -39], [30, -10]]), (b^1, a^-4, [[146, -39], [40, -10]]), (b^1, a^-5, [[185, -39], [50, -10]]), (b^1, a^-6, [[224, -39], [60, -10]]), (b^1, a^-7, [[263, -39], [70, -10]]), (b^1, a^-8, [[302, -39], [80, -10]]), (b^1, a^-9, [[341, -39], [90, -10]]), (b^1, a^-10, [[380, -39], [100, -10]])]

Matrix chosen: [[400, 39], [100, 10]] for number (24702922333091, -96831551985753)

Matrix list sorted by distance from 0: [(b^1, a^10, [[400, 39], [100, 10]]), (b^1, a^9, [[361, 39], [90, 10]]), (b^1, a^8, [[322, 39], [80, 10]]), (b^1, a^7, [[283, 39], [70, 10]]), (b^1, a^6, [[244, 39], [60, 10]]), (b^1, a^5, [[205, 39], [50, 10]]), (b^1, a^4, [[166, 39], [40, 10]]), (b^1, a^3, [[127, 39], [30, 10]]), (b^1, a^2, [[88, 39], [20, 10]]), (b^1, a^1, [[49, 39], [10, 10]]), (b^1, a^-1, [[29, -39], [10, -10]]), (b^1, a^-2, [[68, -39], [20, -10]]), (b^1, a^-3, [[107, -39], [30, -10]]), (b^1, a^-4, [[146, -39], [40, -10]]), (b^1, a^-5, [[185, -39], [50, -10]]), (b^1, a^-6, [[224, -39], [60, -10]]), (b^1, a^-7, [[263, -39], [70, -10]]), (b^1, a^-8, [[302, -39], [80, -10]]), (b^1, a^-9, [[341, -39], [90, -10]]), (b^1, a^-10, [[380, -39], [100, -10]])]

Matrix chosen: [[322, 39], [80, 10]] for number (758613080413, -2710393062273)

Matrix list sorted by distance from 0: [(b^1, a^10, [[400, 39], [100, 10]]), (b^1, a^9, [[361, 39], [90, 10]]), (b^1, a^8, [[322, 39], [80, 10]]), (b^1, a^7, [[283, 39], [70, 10]]), (b^1, a^6, [[244, 39], [60, 10]]), (b^1, a^5, [[205, 39], [50, 10]]), (b^1, a^4, [[166, 39], [40, 10]]), (b^1, a^3, [[127, 39], [30, 10]]), (b^1, a^2, [[88, 39], [20, 10]]), (b^1, a^1, [[49, 39], [10, 10]]), (b^1, a^-1, [[29, -39], [10, -10]]), (b^1, a^-2, [[68, -39], [20, -10]]), (b^1, a^-3, [[107, -39], [30, -10]]), (b^1, a^-4, [[146, -39], [40, -10]]), (b^1, a^-5, [[185, -39], [50, -10]]), (b^1, a^-6, [[224, -39], [60, -10]]), (b^1, a^-7, [[263, -39], [70, -10]]), (b^1, a^-8, [[302, -39], [80, -10]]), (b^1, a^-9, [[341, -39], [90, -10]]), (b^1, a^-10, [[380, -39], [100, -10]])]

Matrix chosen: [[473, -78], [-30, 5]] for number (140192263999, 2481979513377)

Matrix list sorted by distance from 0: [(b^-4, a^10, [[775, 78], [-50, -5]]), (b^-4, a^9, [[697, 78], [-45, -5]]), (b^-4, a^8, [[619, 78], [-40, -5]]), (b^-4, a^7, [[541, 78], [-35, -5]]), (b^-4, a^6, [[463, 78], [-30, -5]]), (b^-4, a^5, [[385, 78], [-25, -5]]), (b^-4, a^4, [[307, 78], [-20, -5]]), (b^-4, a^3, [[229, 78], [-15, -5]]), (b^-4, a^2, [[151, 78], [-10, -5]]), (b^-4, a^1, [[73, 78], [-5, -5]]), (b^-4, a^-1, [[83, -78], [-5, 5]]), (b^-4, a^-2, [[161, -78], [-10, 5]]), (b^-4, a^-3, [[239, -78], [-15, 5]]), (b^-4, a^-4, [[317, -78], [-20, 5]]), (b^-4, a^-5, [[395, -78], [-25, 5]]), (b^-4, a^-6, [[473, -78], [-30, 5]]), (b^-4, a^-7, [[551, -78], [-35, 5]]), (b^-4, a^-8, [[629, -78], [-40, 5]]), (b^-4, a^-9, [[707, -78], [-45, 5]]), (b^-4, a^-10, [[785, -78], [-50, 5]])]

Matrix chosen: [[68, 39], [-20, -10]] for number (4970327135929, 19331275165839)

Matrix list sorted by distance from 0: [(b^-1, a^10, [[380, 39], [-100, -10]]), (b^-1, a^9, [[341, 39], [-90, -10]]), (b^-1, a^8, [[302, 39], [-80, -10]]), (b^-1, a^7, [[263, 39], [-70, -10]]), (b^-1, a^6, [[224, 39], [-60, -10]]), (b^-1, a^5, [[185, 39], [-50, -10]]), (b^-1, a^4, [[146, 39], [-40, -10]]), (b^-1, a^3, [[107, 39], [-30, -10]]), (b^-1, a^2, [[68, 39], [-20, -10]]), (b^-1, a^1, [[29, 39], [-10, -10]]), (b^-1, a^-1, [[49, -39], [-10, 10]]), (b^-1, a^-2, [[88, -39], [-20, 10]]), (b^-1, a^-3, [[127, -39], [-30, 10]]), (b^-1, a^-4, [[166, -39], [-40, 10]]), (b^-1, a^-5, [[205, -39], [-50, 10]]), (b^-1, a^-6, [[244, -39], [-60, 10]]), (b^-1, a^-7, [[283, -39], [-70, 10]]), (b^-1, a^-8, [[322, -39], [-80, 10]]), (b^-1, a^-9, [[361, -39], [-90, 10]]), (b^-1, a^-10, [[400, -39], [-100, 10]])]

Matrix chosen: [[115, 39], [-6, -2]] for number (69737887529, 927057959919)

Matrix list sorted by distance from 0: [(b^-5, a^10, [[388, 39], [-20, -2]]), (b^-5, a^9, [[349, 39], [-18, -2]]), (b^-5, a^8, [[310, 39], [-16, -2]]), (b^-5, a^7, [[271, 39], [-14, -2]]), (b^-5, a^6, [[232, 39], [-12, -2]]), (b^-5, a^5, [[193, 39], [-10, -2]]), (b^-5, a^4, [[154, 39], [-8, -2]]), (b^-5, a^3, [[115, 39], [-6, -2]]), (b^-5, a^2, [[76, 39], [-4, -2]]), (b^-5, a^1, [[37, 39], [-2, -2]]), (b^-5, a^-1, [[41, -39], [-2, 2]]), (b^-5, a^-2, [[80, -39], [-4, 2]]), (b^-5, a^-3, [[119, -39], [-6, 2]]), (b^-5, a^-4, [[158, -39], [-8, 2]]), (b^-5, a^-5, [[197, -39], [-10, 2]]), (b^-5, a^-6, [[236, -39], [-12, 2]]), (b^-5, a^-7, [[275, -39], [-14, 2]]), (b^-5, a^-8, [[314, -39], [-16, 2]]), (b^-5, a^-9, [[353, -39], [-18, 2]]), (b^-5, a^-10, [[392, -39], [-20, 2]])]

Matrix chosen: [[200, -39], [-25, 5]] for number (55253074772293, 436357238105763)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]])]

Matrix chosen: [[361, -39], [-90, 10]] for number (7102629767585, 26916274409388)

Matrix list sorted by distance from 0: [(b^-1, a^10, [[380, 39], [-100, -10]]), (b^-1, a^8, [[302, 39], [-80, -10]]), (b^-1, a^7, [[263, 39], [-70, -10]]), (b^-1, a^6, [[224, 39], [-60, -10]]), (b^-1, a^5, [[185, 39], [-50, -10]]), (b^-1, a^4, [[146, 39], [-40, -10]]), (b^-1, a^3, [[107, 39], [-30, -10]]), (b^-1, a^2, [[68, 39], [-20, -10]]), (b^-1, a^1, [[29, 39], [-10, -10]]), (b^-1, a^-1, [[49, -39], [-10, 10]]), (b^-1, a^-2, [[88, -39], [-20, 10]]), (b^-1, a^-3, [[127, -39], [-30, 10]]), (b^-1, a^-4, [[166, -39], [-40, 10]]), (b^-1, a^-5, [[205, -39], [-50, 10]]), (b^-1, a^-6, [[244, -39], [-60, 10]]), (b^-1, a^-7, [[283, -39], [-70, 10]]), (b^-1, a^-8, [[322, -39], [-80, 10]]), (b^-1, a^-9, [[361, -39], [-90, 10]]), (b^-1, a^-10, [[400, -39], [-100, 10]]), (b^-1, a^9, [[341, 39], [-90, -10]])]

Matrix chosen: [[388, -39], [20, -2]] for number (93589219687, -1567963368387)

Matrix list sorted by distance from 0: [(b^5, a^10, [[392, 39], [20, 2]]), (b^5, a^9, [[353, 39], [18, 2]]), (b^5, a^8, [[314, 39], [16, 2]]), (b^5, a^7, [[275, 39], [14, 2]]), (b^5, a^6, [[236, 39], [12, 2]]), (b^5, a^5, [[197, 39], [10, 2]]), (b^5, a^4, [[158, 39], [8, 2]]), (b^5, a^3, [[119, 39], [6, 2]]), (b^5, a^2, [[80, 39], [4, 2]]), (b^5, a^1, [[41, 39], [2, 2]]), (b^5, a^-1, [[37, -39], [2, -2]]), (b^5, a^-2, [[76, -39], [4, -2]]), (b^5, a^-3, [[115, -39], [6, -2]]), (b^5, a^-4, [[154, -39], [8, -2]]), (b^5, a^-5, [[193, -39], [10, -2]]), (b^5, a^-6, [[232, -39], [12, -2]]), (b^5, a^-7, [[271, -39], [14, -2]]), (b^5, a^-8, [[310, -39], [16, -2]]), (b^5, a^-9, [[349, -39], [18, -2]]), (b^5, a^-10, [[388, -39], [20, -2]])]

Matrix chosen: [[356, -39], [-45, 5]] for number (71911607914, 539857706349)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]]), (b^-2, a^3, [[112, 39], [-15, -5]])]

Matrix chosen: [[385, 39], [-50, -5]] for number (261949112173, 1903630769157)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]])]

Matrix chosen: [[122, -39], [-15, 5]] for number (85977497059, 697861528962)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]])]

Matrix chosen: [[154, -39], [8, -2]] for number (1027123232427799928, -32647496776903985769)

Matrix list sorted by distance from 0: [(b^5, a^10, [[392, 39], [20, 2]]), (b^5, a^9, [[353, 39], [18, 2]]), (b^5, a^8, [[314, 39], [16, 2]]), (b^5, a^7, [[275, 39], [14, 2]]), (b^5, a^6, [[236, 39], [12, 2]]), (b^5, a^5, [[197, 39], [10, 2]]), (b^5, a^4, [[158, 39], [8, 2]]), (b^5, a^3, [[119, 39], [6, 2]]), (b^5, a^2, [[80, 39], [4, 2]]), (b^5, a^1, [[41, 39], [2, 2]]), (b^5, a^-1, [[37, -39], [2, -2]]), (b^5, a^-2, [[76, -39], [4, -2]]), (b^5, a^-3, [[115, -39], [6, -2]]), (b^5, a^-4, [[154, -39], [8, -2]]), (b^5, a^-5, [[193, -39], [10, -2]]), (b^5, a^-6, [[232, -39], [12, -2]]), (b^5, a^-7, [[271, -39], [14, -2]]), (b^5, a^-8, [[310, -39], [16, -2]]), (b^5, a^-9, [[349, -39], [18, -2]]), (b^5, a^-10, [[388, -39], [20, -2]])]

Matrix chosen: [[575, -117], [50, -10]] for number (1027123232427799928, -12618593744561887173)

Matrix list sorted by distance from 0: [(b^3, a^10, [[1180, 117], [100, 10]]), (b^3, a^9, [[1063, 117], [90, 10]]), (b^3, a^8, [[946, 117], [80, 10]]), (b^3, a^7, [[829, 117], [70, 10]]), (b^3, a^6, [[712, 117], [60, 10]]), (b^3, a^5, [[595, 117], [50, 10]]), (b^3, a^4, [[478, 117], [40, 10]]), (b^3, a^3, [[361, 117], [30, 10]]), (b^3, a^2, [[244, 117], [20, 10]]), (b^3, a^1, [[127, 117], [10, 10]]), (b^3, a^-1, [[107, -117], [10, -10]]), (b^3, a^-2, [[224, -117], [20, -10]]), (b^3, a^-3, [[341, -117], [30, -10]]), (b^3, a^-4, [[458, -117], [40, -10]]), (b^3, a^-5, [[575, -117], [50, -10]]), (b^3, a^-6, [[692, -117], [60, -10]]), (b^3, a^-7, [[809, -117], [70, -10]]), (b^3, a^-8, [[926, -117], [80, -10]]), (b^3, a^-9, [[1043, -117], [90, -10]]), (b^3, a^-10, [[1160, -117], [100, -10]])]

Matrix chosen: [[73, -39], [10, -5]] for number (123945608651931647, -1034156057458134819)

Matrix list sorted by distance from 0: [(b^2, a^10, [[395, 39], [50, 5]]), (b^2, a^9, [[356, 39], [45, 5]]), (b^2, a^8, [[317, 39], [40, 5]]), (b^2, a^7, [[278, 39], [35, 5]]), (b^2, a^6, [[239, 39], [30, 5]]), (b^2, a^5, [[200, 39], [25, 5]]), (b^2, a^4, [[161, 39], [20, 5]]), (b^2, a^3, [[122, 39], [15, 5]]), (b^2, a^2, [[83, 39], [10, 5]]), (b^2, a^1, [[44, 39], [5, 5]]), (b^2, a^-1, [[34, -39], [5, -5]]), (b^2, a^-2, [[73, -39], [10, -5]]), (b^2, a^-3, [[112, -39], [15, -5]]), (b^2, a^-4, [[151, -39], [20, -5]]), (b^2, a^-5, [[190, -39], [25, -5]]), (b^2, a^-6, [[229, -39], [30, -5]]), (b^2, a^-7, [[268, -39], [35, -5]]), (b^2, a^-8, [[307, -39], [40, -5]]), (b^2, a^-9, [[346, -39], [45, -5]]), (b^2, a^-10, [[385, -39], [50, -5]])]

Matrix chosen: [[112, 39], [-15, -5]] for number (111543209760760277, 881764063200916857)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]])]

Matrix chosen: [[235, -39], [-6, 1]] for number (152747399044263119, 18438929089861046871)

Matrix list sorted by distance from 0: [(b^-10, a^10, [[389, 39], [-10, -1]]), (b^-10, a^9, [[350, 39], [-9, -1]]), (b^-10, a^8, [[311, 39], [-8, -1]]), (b^-10, a^7, [[272, 39], [-7, -1]]), (b^-10, a^6, [[233, 39], [-6, -1]]), (b^-10, a^5, [[194, 39], [-5, -1]]), (b^-10, a^4, [[155, 39], [-4, -1]]), (b^-10, a^3, [[116, 39], [-3, -1]]), (b^-10, a^2, [[77, 39], [-2, -1]]), (b^-10, a^1, [[38, 39], [-1, -1]]), (b^-10, a^-1, [[40, -39], [-1, 1]]), (b^-10, a^-2, [[79, -39], [-2, 1]]), (b^-10, a^-3, [[118, -39], [-3, 1]]), (b^-10, a^-4, [[157, -39], [-4, 1]]), (b^-10, a^-5, [[196, -39], [-5, 1]]), (b^-10, a^-6, [[235, -39], [-6, 1]]), (b^-10, a^-7, [[274, -39], [-7, 1]]), (b^-10, a^-8, [[313, -39], [-8, 1]]), (b^-10, a^-9, [[352, -39], [-9, 1]]), (b^-10, a^-10, [[391, -39], [-10, 1]])]

Matrix chosen: [[352, -39], [-9, 1]] for number (152747399044263119, 12481780527134785230)

Matrix list sorted by distance from 0: [(b^-10, a^10, [[389, 39], [-10, -1]]), (b^-10, a^9, [[350, 39], [-9, -1]]), (b^-10, a^8, [[311, 39], [-8, -1]]), (b^-10, a^7, [[272, 39], [-7, -1]]), (b^-10, a^6, [[233, 39], [-6, -1]]), (b^-10, a^5, [[194, 39], [-5, -1]]), (b^-10, a^4, [[155, 39], [-4, -1]]), (b^-10, a^3, [[116, 39], [-3, -1]]), (b^-10, a^2, [[77, 39], [-2, -1]]), (b^-10, a^1, [[38, 39], [-1, -1]]), (b^-10, a^-1, [[40, -39], [-1, 1]]), (b^-10, a^-2, [[79, -39], [-2, 1]]), (b^-10, a^-3, [[118, -39], [-3, 1]]), (b^-10, a^-4, [[157, -39], [-4, 1]]), (b^-10, a^-5, [[196, -39], [-5, 1]]), (b^-10, a^-6, [[235, -39], [-6, 1]]), (b^-10, a^-7, [[274, -39], [-7, 1]]), (b^-10, a^-8, [[313, -39], [-8, 1]]), (b^-10, a^-9, [[352, -39], [-9, 1]]), (b^-10, a^-10, [[391, -39], [-10, 1]])]

Matrix chosen: [[155, 39], [-4, -1]] for number (152747399044263119, 6524631964408523589)

Matrix list sorted by distance from 0: [(b^-10, a^10, [[389, 39], [-10, -1]]), (b^-10, a^9, [[350, 39], [-9, -1]]), (b^-10, a^8, [[311, 39], [-8, -1]]), (b^-10, a^7, [[272, 39], [-7, -1]]), (b^-10, a^6, [[233, 39], [-6, -1]]), (b^-10, a^5, [[194, 39], [-5, -1]]), (b^-10, a^4, [[155, 39], [-4, -1]]), (b^-10, a^3, [[116, 39], [-3, -1]]), (b^-10, a^2, [[77, 39], [-2, -1]]), (b^-10, a^1, [[38, 39], [-1, -1]]), (b^-10, a^-1, [[40, -39], [-1, 1]]), (b^-10, a^-2, [[79, -39], [-2, 1]]), (b^-10, a^-3, [[118, -39], [-3, 1]]), (b^-10, a^-4, [[157, -39], [-4, 1]]), (b^-10, a^-5, [[196, -39], [-5, 1]]), (b^-10, a^-6, [[235, -39], [-6, 1]]), (b^-10, a^-7, [[274, -39], [-7, 1]]), (b^-10, a^-8, [[313, -39], [-8, 1]]), (b^-10, a^-9, [[352, -39], [-9, 1]]), (b^-10, a^-10, [[391, -39], [-10, 1]])]

Matrix chosen: [[49, -39], [-10, 10]] for number (152747399044263119, 567483401682261948)

Matrix list sorted by distance from 0: [(b^-1, a^10, [[380, 39], [-100, -10]]), (b^-1, a^9, [[341, 39], [-90, -10]]), (b^-1, a^8, [[302, 39], [-80, -10]]), (b^-1, a^7, [[263, 39], [-70, -10]]), (b^-1, a^6, [[224, 39], [-60, -10]]), (b^-1, a^4, [[146, 39], [-40, -10]]), (b^-1, a^3, [[107, 39], [-30, -10]]), (b^-1, a^2, [[68, 39], [-20, -10]]), (b^-1, a^1, [[29, 39], [-10, -10]]), (b^-1, a^-1, [[49, -39], [-10, 10]]), (b^-1, a^-2, [[88, -39], [-20, 10]]), (b^-1, a^-3, [[127, -39], [-30, 10]]), (b^-1, a^-4, [[166, -39], [-40, 10]]), (b^-1, a^-5, [[205, -39], [-50, 10]]), (b^-1, a^-6, [[244, -39], [-60, 10]]), (b^-1, a^-7, [[283, -39], [-70, 10]]), (b^-1, a^-8, [[322, -39], [-80, 10]]), (b^-1, a^-9, [[361, -39], [-90, 10]]), (b^-1, a^-10, [[400, -39], [-100, 10]]), (b^-1, a^5, [[185, 39], [-50, -10]])]

Matrix chosen: [[193, -39], [10, -2]] for number (87120806163738851, -2649469283393095059)

Matrix list sorted by distance from 0: [(b^5, a^10, [[392, 39], [20, 2]]), (b^5, a^9, [[353, 39], [18, 2]]), (b^5, a^8, [[314, 39], [16, 2]]), (b^5, a^7, [[275, 39], [14, 2]]), (b^5, a^6, [[236, 39], [12, 2]]), (b^5, a^5, [[197, 39], [10, 2]]), (b^5, a^4, [[158, 39], [8, 2]]), (b^5, a^3, [[119, 39], [6, 2]]), (b^5, a^2, [[80, 39], [4, 2]]), (b^5, a^1, [[41, 39], [2, 2]]), (b^5, a^-1, [[37, -39], [2, -2]]), (b^5, a^-2, [[76, -39], [4, -2]]), (b^5, a^-3, [[115, -39], [6, -2]]), (b^5, a^-4, [[154, -39], [8, -2]]), (b^5, a^-5, [[193, -39], [10, -2]]), (b^5, a^-6, [[232, -39], [12, -2]]), (b^5, a^-7, [[271, -39], [14, -2]]), (b^5, a^-8, [[310, -39], [16, -2]]), (b^5, a^-9, [[349, -39], [18, -2]]), (b^5, a^-10, [[388, -39], [20, -2]])]

Matrix chosen: [[595, 117], [50, 10]] for number (174241612327477702, -1901227126400374929)

Matrix list sorted by distance from 0: [(b^3, a^10, [[1180, 117], [100, 10]]), (b^3, a^9, [[1063, 117], [90, 10]]), (b^3, a^8, [[946, 117], [80, 10]]), (b^3, a^7, [[829, 117], [70, 10]]), (b^3, a^6, [[712, 117], [60, 10]]), (b^3, a^5, [[595, 117], [50, 10]]), (b^3, a^4, [[478, 117], [40, 10]]), (b^3, a^3, [[361, 117], [30, 10]]), (b^3, a^2, [[244, 117], [20, 10]]), (b^3, a^1, [[127, 117], [10, 10]]), (b^3, a^-1, [[107, -117], [10, -10]]), (b^3, a^-2, [[224, -117], [20, -10]]), (b^3, a^-3, [[341, -117], [30, -10]]), (b^3, a^-4, [[458, -117], [40, -10]]), (b^3, a^-5, [[575, -117], [50, -10]]), (b^3, a^-6, [[692, -117], [60, -10]]), (b^3, a^-7, [[809, -117], [70, -10]]), (b^3, a^-8, [[926, -117], [80, -10]]), (b^3, a^-9, [[1043, -117], [90, -10]]), (b^3, a^-10, [[1160, -117], [100, -10]])]

Matrix chosen: [[29, 39], [-10, -10]] for number (92104686240908794, 343499344577785461)

Matrix list sorted by distance from 0: [(b^-1, a^10, [[380, 39], [-100, -10]]), (b^-1, a^9, [[341, 39], [-90, -10]]), (b^-1, a^8, [[302, 39], [-80, -10]]), (b^-1, a^7, [[263, 39], [-70, -10]]), (b^-1, a^6, [[224, 39], [-60, -10]]), (b^-1, a^5, [[185, 39], [-50, -10]]), (b^-1, a^4, [[146, 39], [-40, -10]]), (b^-1, a^3, [[107, 39], [-30, -10]]), (b^-1, a^2, [[68, 39], [-20, -10]]), (b^-1, a^1, [[29, 39], [-10, -10]]), (b^-1, a^-1, [[49, -39], [-10, 10]]), (b^-1, a^-2, [[88, -39], [-20, 10]]), (b^-1, a^-3, [[127, -39], [-30, 10]]), (b^-1, a^-4, [[166, -39], [-40, 10]]), (b^-1, a^-5, [[205, -39], [-50, 10]]), (b^-1, a^-6, [[244, -39], [-60, 10]]), (b^-1, a^-7, [[283, -39], [-70, 10]]), (b^-1, a^-8, [[322, -39], [-80, 10]]), (b^-1, a^-9, [[361, -39], [-90, 10]]), (b^-1, a^-10, [[400, -39], [-100, 10]])]

Matrix chosen: [[34, 39], [-5, -5]] for number (5372260824110549, 39272329404397089)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]]), (b^-2, a^2, [[73, 39], [-10, -5]])]

Matrix chosen: [[233, -39], [6, -1]] for number (548253883900813, -13156525118325966)

Matrix list sorted by distance from 0: [(b^10, a^10, [[391, 39], [10, 1]]), (b^10, a^9, [[352, 39], [9, 1]]), (b^10, a^8, [[313, 39], [8, 1]]), (b^10, a^7, [[274, 39], [7, 1]]), (b^10, a^6, [[235, 39], [6, 1]]), (b^10, a^5, [[196, 39], [5, 1]]), (b^10, a^4, [[157, 39], [4, 1]]), (b^10, a^3, [[118, 39], [3, 1]]), (b^10, a^2, [[79, 39], [2, 1]]), (b^10, a^1, [[40, 39], [1, 1]]), (b^10, a^-1, [[38, -39], [1, -1]]), (b^10, a^-2, [[77, -39], [2, -1]]), (b^10, a^-3, [[116, -39], [3, -1]]), (b^10, a^-4, [[155, -39], [4, -1]]), (b^10, a^-5, [[194, -39], [5, -1]]), (b^10, a^-6, [[233, -39], [6, -1]]), (b^10, a^-7, [[272, -39], [7, -1]]), (b^10, a^-8, [[311, -39], [8, -1]]), (b^10, a^-9, [[350, -39], [9, -1]]), (b^10, a^-10, [[389, -39], [10, -1]])]

Matrix chosen: [[388, 39], [-20, -2]] for number (548253883900813, 8225376353805741)

Matrix list sorted by distance from 0: [(b^-5, a^10, [[388, 39], [-20, -2]]), (b^-5, a^9, [[349, 39], [-18, -2]]), (b^-5, a^8, [[310, 39], [-16, -2]]), (b^-5, a^7, [[271, 39], [-14, -2]]), (b^-5, a^6, [[232, 39], [-12, -2]]), (b^-5, a^5, [[193, 39], [-10, -2]]), (b^-5, a^4, [[154, 39], [-8, -2]]), (b^-5, a^3, [[115, 39], [-6, -2]]), (b^-5, a^2, [[76, 39], [-4, -2]]), (b^-5, a^1, [[37, 39], [-2, -2]]), (b^-5, a^-1, [[41, -39], [-2, 2]]), (b^-5, a^-2, [[80, -39], [-4, 2]]), (b^-5, a^-3, [[119, -39], [-6, 2]]), (b^-5, a^-4, [[158, -39], [-8, 2]]), (b^-5, a^-5, [[197, -39], [-10, 2]]), (b^-5, a^-6, [[236, -39], [-12, 2]]), (b^-5, a^-7, [[275, -39], [-14, 2]]), (b^-5, a^-8, [[314, -39], [-16, 2]]), (b^-5, a^-9, [[353, -39], [-18, 2]]), (b^-5, a^-10, [[392, -39], [-20, 2]])]

Matrix chosen: [[341, -39], [90, -10]] for number (15728631830542307, -58057264641986337)

Matrix list sorted by distance from 0: [(b^1, a^10, [[400, 39], [100, 10]]), (b^1, a^9, [[361, 39], [90, 10]]), (b^1, a^8, [[322, 39], [80, 10]]), (b^1, a^7, [[283, 39], [70, 10]]), (b^1, a^6, [[244, 39], [60, 10]]), (b^1, a^5, [[205, 39], [50, 10]]), (b^1, a^4, [[166, 39], [40, 10]]), (b^1, a^3, [[127, 39], [30, 10]]), (b^1, a^2, [[88, 39], [20, 10]]), (b^1, a^1, [[49, 39], [10, 10]]), (b^1, a^-1, [[29, -39], [10, -10]]), (b^1, a^-2, [[68, -39], [20, -10]]), (b^1, a^-3, [[107, -39], [30, -10]]), (b^1, a^-4, [[146, -39], [40, -10]]), (b^1, a^-6, [[224, -39], [60, -10]]), (b^1, a^-7, [[263, -39], [70, -10]]), (b^1, a^-8, [[302, -39], [80, -10]]), (b^1, a^-9, [[341, -39], [90, -10]]), (b^1, a^-10, [[380, -39], [100, -10]]), (b^1, a^-5, [[185, -39], [50, -10]])]

Matrix chosen: [[244, 39], [60, 10]] for number (6412346135965688, -25642125115761999)

Matrix list sorted by distance from 0: [(b^1, a^9, [[361, 39], [90, 10]]), (b^1, a^8, [[322, 39], [80, 10]]), (b^1, a^7, [[283, 39], [70, 10]]), (b^1, a^6, [[244, 39], [60, 10]]), (b^1, a^5, [[205, 39], [50, 10]]), (b^1, a^4, [[166, 39], [40, 10]]), (b^1, a^3, [[127, 39], [30, 10]]), (b^1, a^2, [[88, 39], [20, 10]]), (b^1, a^1, [[49, 39], [10, 10]]), (b^1, a^-1, [[29, -39], [10, -10]]), (b^1, a^-2, [[68, -39], [20, -10]]), (b^1, a^-3, [[107, -39], [30, -10]]), (b^1, a^-4, [[146, -39], [40, -10]]), (b^1, a^-5, [[185, -39], [50, -10]]), (b^1, a^-6, [[224, -39], [60, -10]]), (b^1, a^-7, [[263, -39], [70, -10]]), (b^1, a^-8, [[302, -39], [80, -10]]), (b^1, a^-9, [[341, -39], [90, -10]]), (b^1, a^-10, [[380, -39], [100, -10]]), (b^1, a^10, [[400, 39], [100, 10]])]

Matrix chosen: [[161, 39], [20, 5]] for number (362971405037650, -3169875927479079)

Matrix list sorted by distance from 0: [(b^2, a^10, [[395, 39], [50, 5]]), (b^2, a^9, [[356, 39], [45, 5]]), (b^2, a^8, [[317, 39], [40, 5]]), (b^2, a^7, [[278, 39], [35, 5]]), (b^2, a^6, [[239, 39], [30, 5]]), (b^2, a^5, [[200, 39], [25, 5]]), (b^2, a^4, [[161, 39], [20, 5]]), (b^2, a^3, [[122, 39], [15, 5]]), (b^2, a^2, [[83, 39], [10, 5]]), (b^2, a^-1, [[34, -39], [5, -5]]), (b^2, a^-2, [[73, -39], [10, -5]]), (b^2, a^-3, [[112, -39], [15, -5]]), (b^2, a^-4, [[151, -39], [20, -5]]), (b^2, a^-5, [[190, -39], [25, -5]]), (b^2, a^-6, [[229, -39], [30, -5]]), (b^2, a^-7, [[268, -39], [35, -5]]), (b^2, a^-8, [[307, -39], [40, -5]]), (b^2, a^-9, [[346, -39], [45, -5]]), (b^2, a^-10, [[385, -39], [50, -5]]), (b^2, a^1, [[44, 39], [5, 5]])]

Matrix chosen: [[41, 39], [2, 2]] for number (24272436852241, -338698968185409)

Matrix list sorted by distance from 0: [(b^5, a^10, [[392, 39], [20, 2]]), (b^5, a^9, [[353, 39], [18, 2]]), (b^5, a^8, [[314, 39], [16, 2]]), (b^5, a^7, [[275, 39], [14, 2]]), (b^5, a^6, [[236, 39], [12, 2]]), (b^5, a^5, [[197, 39], [10, 2]]), (b^5, a^4, [[158, 39], [8, 2]]), (b^5, a^3, [[119, 39], [6, 2]]), (b^5, a^2, [[80, 39], [4, 2]]), (b^5, a^1, [[41, 39], [2, 2]]), (b^5, a^-1, [[37, -39], [2, -2]]), (b^5, a^-2, [[76, -39], [4, -2]]), (b^5, a^-3, [[115, -39], [6, -2]]), (b^5, a^-4, [[154, -39], [8, -2]]), (b^5, a^-5, [[193, -39], [10, -2]]), (b^5, a^-6, [[232, -39], [12, -2]]), (b^5, a^-7, [[271, -39], [14, -2]]), (b^5, a^-8, [[310, -39], [16, -2]]), (b^5, a^-9, [[349, -39], [18, -2]]), (b^5, a^-10, [[388, -39], [20, -2]])]

Matrix chosen: [[263, -39], [70, -10]] for number (137923046916181, -529888293348921)

Matrix list sorted by distance from 0: [(b^1, a^10, [[400, 39], [100, 10]]), (b^1, a^9, [[361, 39], [90, 10]]), (b^1, a^8, [[322, 39], [80, 10]]), (b^1, a^7, [[283, 39], [70, 10]]), (b^1, a^6, [[244, 39], [60, 10]]), (b^1, a^5, [[205, 39], [50, 10]]), (b^1, a^4, [[166, 39], [40, 10]]), (b^1, a^3, [[127, 39], [30, 10]]), (b^1, a^2, [[88, 39], [20, 10]]), (b^1, a^1, [[49, 39], [10, 10]]), (b^1, a^-1, [[29, -39], [10, -10]]), (b^1, a^-2, [[68, -39], [20, -10]]), (b^1, a^-3, [[107, -39], [30, -10]]), (b^1, a^-4, [[146, -39], [40, -10]]), (b^1, a^-5, [[185, -39], [50, -10]]), (b^1, a^-6, [[224, -39], [60, -10]]), (b^1, a^-7, [[263, -39], [70, -10]]), (b^1, a^-8, [[302, -39], [80, -10]]), (b^1, a^-9, [[341, -39], [90, -10]]), (b^1, a^-10, [[380, -39], [100, -10]])]

Matrix chosen: [[314, -39], [-16, 2]] for number (13082519911637, 459007090411467)

Matrix list sorted by distance from 0: [(b^-5, a^10, [[388, 39], [-20, -2]]), (b^-5, a^9, [[349, 39], [-18, -2]]), (b^-5, a^8, [[310, 39], [-16, -2]]), (b^-5, a^7, [[271, 39], [-14, -2]]), (b^-5, a^6, [[232, 39], [-12, -2]]), (b^-5, a^5, [[193, 39], [-10, -2]]), (b^-5, a^4, [[154, 39], [-8, -2]]), (b^-5, a^3, [[115, 39], [-6, -2]]), (b^-5, a^2, [[76, 39], [-4, -2]]), (b^-5, a^1, [[37, 39], [-2, -2]]), (b^-5, a^-1, [[41, -39], [-2, 2]]), (b^-5, a^-2, [[80, -39], [-4, 2]]), (b^-5, a^-3, [[119, -39], [-6, 2]]), (b^-5, a^-4, [[158, -39], [-8, 2]]), (b^-5, a^-5, [[197, -39], [-10, 2]]), (b^-5, a^-6, [[236, -39], [-12, 2]]), (b^-5, a^-7, [[275, -39], [-14, 2]]), (b^-5, a^-8, [[314, -39], [-16, 2]]), (b^-5, a^-9, [[353, -39], [-18, 2]]), (b^-5, a^-10, [[392, -39], [-20, 2]])]

Matrix chosen: [[197, -39], [-10, 2]] for number (26165039823274, 407795904269091)

Matrix list sorted by distance from 0: [(b^-5, a^10, [[388, 39], [-20, -2]]), (b^-5, a^9, [[349, 39], [-18, -2]]), (b^-5, a^8, [[310, 39], [-16, -2]]), (b^-5, a^7, [[271, 39], [-14, -2]]), (b^-5, a^6, [[232, 39], [-12, -2]]), (b^-5, a^5, [[193, 39], [-10, -2]]), (b^-5, a^4, [[154, 39], [-8, -2]]), (b^-5, a^3, [[115, 39], [-6, -2]]), (b^-5, a^2, [[76, 39], [-4, -2]]), (b^-5, a^1, [[37, 39], [-2, -2]]), (b^-5, a^-1, [[41, -39], [-2, 2]]), (b^-5, a^-2, [[80, -39], [-4, 2]]), (b^-5, a^-3, [[119, -39], [-6, 2]]), (b^-5, a^-4, [[158, -39], [-8, 2]]), (b^-5, a^-5, [[197, -39], [-10, 2]]), (b^-5, a^-6, [[236, -39], [-12, 2]]), (b^-5, a^-7, [[275, -39], [-14, 2]]), (b^-5, a^-8, [[314, -39], [-16, 2]]), (b^-5, a^-9, [[353, -39], [-18, 2]]), (b^-5, a^-10, [[392, -39], [-20, 2]])]

Matrix chosen: [[380, -39], [100, -10]] for number (13082519911637, -51211186142376)

Matrix list sorted by distance from 0: [(b^1, a^10, [[400, 39], [100, 10]]), (b^1, a^9, [[361, 39], [90, 10]]), (b^1, a^8, [[322, 39], [80, 10]]), (b^1, a^7, [[283, 39], [70, 10]]), (b^1, a^6, [[244, 39], [60, 10]]), (b^1, a^5, [[205, 39], [50, 10]]), (b^1, a^4, [[166, 39], [40, 10]]), (b^1, a^3, [[127, 39], [30, 10]]), (b^1, a^2, [[88, 39], [20, 10]]), (b^1, a^1, [[49, 39], [10, 10]]), (b^1, a^-1, [[29, -39], [10, -10]]), (b^1, a^-2, [[68, -39], [20, -10]]), (b^1, a^-3, [[107, -39], [30, -10]]), (b^1, a^-4, [[146, -39], [40, -10]]), (b^1, a^-5, [[185, -39], [50, -10]]), (b^1, a^-6, [[224, -39], [60, -10]]), (b^1, a^-7, [[263, -39], [70, -10]]), (b^1, a^-8, [[302, -39], [80, -10]]), (b^1, a^-9, [[341, -39], [90, -10]]), (b^1, a^-10, [[380, -39], [100, -10]])]

Matrix chosen: [[361, 117], [30, 10]] for number (167843092097, -1893584869917)

Matrix list sorted by distance from 0: [(b^3, a^10, [[1180, 117], [100, 10]]), (b^3, a^9, [[1063, 117], [90, 10]]), (b^3, a^8, [[946, 117], [80, 10]]), (b^3, a^7, [[829, 117], [70, 10]]), (b^3, a^6, [[712, 117], [60, 10]]), (b^3, a^5, [[595, 117], [50, 10]]), (b^3, a^4, [[478, 117], [40, 10]]), (b^3, a^3, [[361, 117], [30, 10]]), (b^3, a^2, [[244, 117], [20, 10]]), (b^3, a^1, [[127, 117], [10, 10]]), (b^3, a^-1, [[107, -117], [10, -10]]), (b^3, a^-2, [[224, -117], [20, -10]]), (b^3, a^-3, [[341, -117], [30, -10]]), (b^3, a^-4, [[458, -117], [40, -10]]), (b^3, a^-5, [[575, -117], [50, -10]]), (b^3, a^-6, [[692, -117], [60, -10]]), (b^3, a^-7, [[809, -117], [70, -10]]), (b^3, a^-8, [[926, -117], [80, -10]]), (b^3, a^-9, [[1043, -117], [90, -10]]), (b^3, a^-10, [[1160, -117], [100, -10]])]

Matrix chosen: [[88, -39], [-20, 10]] for number (476283763979, 1850507607039)

Matrix list sorted by distance from 0: [(b^-1, a^10, [[380, 39], [-100, -10]]), (b^-1, a^9, [[341, 39], [-90, -10]]), (b^-1, a^8, [[302, 39], [-80, -10]]), (b^-1, a^7, [[263, 39], [-70, -10]]), (b^-1, a^6, [[224, 39], [-60, -10]]), (b^-1, a^5, [[185, 39], [-50, -10]]), (b^-1, a^4, [[146, 39], [-40, -10]]), (b^-1, a^3, [[107, 39], [-30, -10]]), (b^-1, a^2, [[68, 39], [-20, -10]]), (b^-1, a^1, [[29, 39], [-10, -10]]), (b^-1, a^-1, [[49, -39], [-10, 10]]), (b^-1, a^-2, [[88, -39], [-20, 10]]), (b^-1, a^-3, [[127, -39], [-30, 10]]), (b^-1, a^-4, [[166, -39], [-40, 10]]), (b^-1, a^-5, [[205, -39], [-50, 10]]), (b^-1, a^-6, [[244, -39], [-60, 10]]), (b^-1, a^-7, [[283, -39], [-70, 10]]), (b^-1, a^-8, [[322, -39], [-80, 10]]), (b^-1, a^-9, [[361, -39], [-90, 10]]), (b^-1, a^-10, [[400, -39], [-100, 10]])]

Matrix chosen: [[274, 39], [7, 1]] for number (3468354002, -69990724791)

Matrix list sorted by distance from 0: [(b^10, a^10, [[391, 39], [10, 1]]), (b^10, a^9, [[352, 39], [9, 1]]), (b^10, a^8, [[313, 39], [8, 1]]), (b^10, a^7, [[274, 39], [7, 1]]), (b^10, a^6, [[235, 39], [6, 1]]), (b^10, a^5, [[196, 39], [5, 1]]), (b^10, a^4, [[157, 39], [4, 1]]), (b^10, a^3, [[118, 39], [3, 1]]), (b^10, a^2, [[79, 39], [2, 1]]), (b^10, a^1, [[40, 39], [1, 1]]), (b^10, a^-1, [[38, -39], [1, -1]]), (b^10, a^-2, [[77, -39], [2, -1]]), (b^10, a^-3, [[116, -39], [3, -1]]), (b^10, a^-4, [[155, -39], [4, -1]]), (b^10, a^-5, [[194, -39], [5, -1]]), (b^10, a^-6, [[233, -39], [6, -1]]), (b^10, a^-7, [[272, -39], [7, -1]]), (b^10, a^-8, [[311, -39], [8, -1]]), (b^10, a^-9, [[350, -39], [9, -1]]), (b^10, a^-10, [[389, -39], [10, -1]])]

Matrix chosen: [[385, 78], [-25, -5]] for number (3468354002, 65275081287)

Matrix list sorted by distance from 0: [(b^-4, a^10, [[775, 78], [-50, -5]]), (b^-4, a^9, [[697, 78], [-45, -5]]), (b^-4, a^8, [[619, 78], [-40, -5]]), (b^-4, a^7, [[541, 78], [-35, -5]]), (b^-4, a^6, [[463, 78], [-30, -5]]), (b^-4, a^5, [[385, 78], [-25, -5]]), (b^-4, a^4, [[307, 78], [-20, -5]]), (b^-4, a^3, [[229, 78], [-15, -5]]), (b^-4, a^2, [[151, 78], [-10, -5]]), (b^-4, a^1, [[73, 78], [-5, -5]]), (b^-4, a^-1, [[83, -78], [-5, 5]]), (b^-4, a^-2, [[161, -78], [-10, 5]]), (b^-4, a^-3, [[239, -78], [-15, 5]]), (b^-4, a^-4, [[317, -78], [-20, 5]]), (b^-4, a^-5, [[395, -78], [-25, 5]]), (b^-4, a^-6, [[473, -78], [-30, 5]]), (b^-4, a^-7, [[551, -78], [-35, 5]]), (b^-4, a^-8, [[629, -78], [-40, 5]]), (b^-4, a^-9, [[707, -78], [-45, 5]]), (b^-4, a^-10, [[785, -78], [-50, 5]])]

Matrix chosen: [[40, -39], [-1, 1]] for number (3177191447, 242795553117)

Matrix list sorted by distance from 0: [(b^-10, a^10, [[389, 39], [-10, -1]]), (b^-10, a^9, [[350, 39], [-9, -1]]), (b^-10, a^8, [[311, 39], [-8, -1]]), (b^-10, a^7, [[272, 39], [-7, -1]]), (b^-10, a^6, [[233, 39], [-6, -1]]), (b^-10, a^5, [[194, 39], [-5, -1]]), (b^-10, a^4, [[155, 39], [-4, -1]]), (b^-10, a^3, [[116, 39], [-3, -1]]), (b^-10, a^2, [[77, 39], [-2, -1]]), (b^-10, a^1, [[38, 39], [-1, -1]]), (b^-10, a^-1, [[40, -39], [-1, 1]]), (b^-10, a^-2, [[79, -39], [-2, 1]]), (b^-10, a^-3, [[118, -39], [-3, 1]]), (b^-10, a^-4, [[157, -39], [-4, 1]]), (b^-10, a^-5, [[196, -39], [-5, 1]]), (b^-10, a^-6, [[235, -39], [-6, 1]]), (b^-10, a^-7, [[274, -39], [-7, 1]]), (b^-10, a^-8, [[313, -39], [-8, 1]]), (b^-10, a^-9, [[352, -39], [-9, 1]]), (b^-10, a^-10, [[391, -39], [-10, 1]])]

Matrix chosen: [[41, -39], [-2, 2]] for number (3177191447, 118885086684)

Matrix list sorted by distance from 0: [(b^-5, a^10, [[388, 39], [-20, -2]]), (b^-5, a^9, [[349, 39], [-18, -2]]), (b^-5, a^8, [[310, 39], [-16, -2]]), (b^-5, a^7, [[271, 39], [-14, -2]]), (b^-5, a^6, [[232, 39], [-12, -2]]), (b^-5, a^5, [[193, 39], [-10, -2]]), (b^-5, a^4, [[154, 39], [-8, -2]]), (b^-5, a^3, [[115, 39], [-6, -2]]), (b^-5, a^2, [[76, 39], [-4, -2]]), (b^-5, a^1, [[37, 39], [-2, -2]]), (b^-5, a^-1, [[41, -39], [-2, 2]]), (b^-5, a^-2, [[80, -39], [-4, 2]]), (b^-5, a^-3, [[119, -39], [-6, 2]]), (b^-5, a^-4, [[158, -39], [-8, 2]]), (b^-5, a^-5, [[197, -39], [-10, 2]]), (b^-5, a^-6, [[236, -39], [-12, 2]]), (b^-5, a^-7, [[275, -39], [-14, 2]]), (b^-5, a^-8, [[314, -39], [-16, 2]]), (b^-5, a^-9, [[353, -39], [-18, 2]]), (b^-5, a^-10, [[392, -39], [-20, 2]])]

Matrix chosen: [[73, 78], [-5, -5]] for number (6354382894, 113859706935)

Matrix list sorted by distance from 0: [(b^-4, a^10, [[775, 78], [-50, -5]]), (b^-4, a^9, [[697, 78], [-45, -5]]), (b^-4, a^8, [[619, 78], [-40, -5]]), (b^-4, a^7, [[541, 78], [-35, -5]]), (b^-4, a^6, [[463, 78], [-30, -5]]), (b^-4, a^5, [[385, 78], [-25, -5]]), (b^-4, a^4, [[307, 78], [-20, -5]]), (b^-4, a^3, [[229, 78], [-15, -5]]), (b^-4, a^2, [[151, 78], [-10, -5]]), (b^-4, a^1, [[73, 78], [-5, -5]]), (b^-4, a^-1, [[83, -78], [-5, 5]]), (b^-4, a^-2, [[161, -78], [-10, 5]]), (b^-4, a^-3, [[239, -78], [-15, 5]]), (b^-4, a^-4, [[317, -78], [-20, 5]]), (b^-4, a^-5, [[395, -78], [-25, 5]]), (b^-4, a^-6, [[473, -78], [-30, 5]]), (b^-4, a^-7, [[551, -78], [-35, 5]]), (b^-4, a^-8, [[629, -78], [-40, 5]]), (b^-4, a^-9, [[707, -78], [-45, 5]]), (b^-4, a^-10, [[785, -78], [-50, 5]])]

Matrix chosen: [[239, -39], [-30, 5]] for number (835915817, 5456386572)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]])]

Matrix chosen: [[127, -39], [-30, 10]] for number (242543761, 944147178)

Matrix list sorted by distance from 0: [(b^-1, a^10, [[380, 39], [-100, -10]]), (b^-1, a^9, [[341, 39], [-90, -10]]), (b^-1, a^8, [[302, 39], [-80, -10]]), (b^-1, a^7, [[263, 39], [-70, -10]]), (b^-1, a^6, [[224, 39], [-60, -10]]), (b^-1, a^5, [[185, 39], [-50, -10]]), (b^-1, a^4, [[146, 39], [-40, -10]]), (b^-1, a^3, [[107, 39], [-30, -10]]), (b^-1, a^2, [[68, 39], [-20, -10]]), (b^-1, a^1, [[29, 39], [-10, -10]]), (b^-1, a^-1, [[49, -39], [-10, 10]]), (b^-1, a^-2, [[88, -39], [-20, 10]]), (b^-1, a^-3, [[127, -39], [-30, 10]]), (b^-1, a^-4, [[166, -39], [-40, 10]]), (b^-1, a^-5, [[205, -39], [-50, 10]]), (b^-1, a^-6, [[244, -39], [-60, 10]]), (b^-1, a^-7, [[283, -39], [-70, 10]]), (b^-1, a^-8, [[322, -39], [-80, 10]]), (b^-1, a^-9, [[361, -39], [-90, 10]]), (b^-1, a^-10, [[400, -39], [-100, 10]])]

Matrix chosen: [[322, -39], [-80, 10]] for number (4243553, 17734899)

Matrix list sorted by distance from 0: [(b^-1, a^10, [[380, 39], [-100, -10]]), (b^-1, a^9, [[341, 39], [-90, -10]]), (b^-1, a^8, [[302, 39], [-80, -10]]), (b^-1, a^7, [[263, 39], [-70, -10]]), (b^-1, a^6, [[224, 39], [-60, -10]]), (b^-1, a^5, [[185, 39], [-50, -10]]), (b^-1, a^4, [[146, 39], [-40, -10]]), (b^-1, a^3, [[107, 39], [-30, -10]]), (b^-1, a^2, [[68, 39], [-20, -10]]), (b^-1, a^1, [[29, 39], [-10, -10]]), (b^-1, a^-1, [[49, -39], [-10, 10]]), (b^-1, a^-2, [[88, -39], [-20, 10]]), (b^-1, a^-3, [[127, -39], [-30, 10]]), (b^-1, a^-5, [[205, -39], [-50, 10]]), (b^-1, a^-6, [[244, -39], [-60, 10]]), (b^-1, a^-7, [[283, -39], [-70, 10]]), (b^-1, a^-8, [[322, -39], [-80, 10]]), (b^-1, a^-9, [[361, -39], [-90, 10]]), (b^-1, a^-10, [[400, -39], [-100, 10]]), (b^-1, a^-4, [[166, -39], [-40, 10]])]

Matrix chosen: [[352, -39], [-9, 1]] for number (2960327, 60825843)

Matrix list sorted by distance from 0: [(b^-10, a^10, [[389, 39], [-10, -1]]), (b^-10, a^9, [[350, 39], [-9, -1]]), (b^-10, a^8, [[311, 39], [-8, -1]]), (b^-10, a^7, [[272, 39], [-7, -1]]), (b^-10, a^6, [[233, 39], [-6, -1]]), (b^-10, a^5, [[194, 39], [-5, -1]]), (b^-10, a^4, [[155, 39], [-4, -1]]), (b^-10, a^3, [[116, 39], [-3, -1]]), (b^-10, a^2, [[77, 39], [-2, -1]]), (b^-10, a^1, [[38, 39], [-1, -1]]), (b^-10, a^-1, [[40, -39], [-1, 1]]), (b^-10, a^-2, [[79, -39], [-2, 1]]), (b^-10, a^-3, [[118, -39], [-3, 1]]), (b^-10, a^-4, [[157, -39], [-4, 1]]), (b^-10, a^-5, [[196, -39], [-5, 1]]), (b^-10, a^-6, [[235, -39], [-6, 1]]), (b^-10, a^-7, [[274, -39], [-7, 1]]), (b^-10, a^-8, [[313, -39], [-8, 1]]), (b^-10, a^-9, [[352, -39], [-9, 1]]), (b^-10, a^-10, [[391, -39], [-10, 1]])]

Matrix chosen: [[629, 78], [40, 5]] for number (2960327, -54626910)

Matrix list sorted by distance from 0: [(b^4, a^10, [[785, 78], [50, 5]]), (b^4, a^9, [[707, 78], [45, 5]]), (b^4, a^8, [[629, 78], [40, 5]]), (b^4, a^7, [[551, 78], [35, 5]]), (b^4, a^6, [[473, 78], [30, 5]]), (b^4, a^5, [[395, 78], [25, 5]]), (b^4, a^4, [[317, 78], [20, 5]]), (b^4, a^3, [[239, 78], [15, 5]]), (b^4, a^2, [[161, 78], [10, 5]]), (b^4, a^1, [[83, 78], [5, 5]]), (b^4, a^-1, [[73, -78], [5, -5]]), (b^4, a^-2, [[151, -78], [10, -5]]), (b^4, a^-3, [[229, -78], [15, -5]]), (b^4, a^-4, [[307, -78], [20, -5]]), (b^4, a^-5, [[385, -78], [25, -5]]), (b^4, a^-6, [[463, -78], [30, -5]]), (b^4, a^-7, [[541, -78], [35, -5]]), (b^4, a^-8, [[619, -78], [40, -5]]), (b^4, a^-9, [[697, -78], [45, -5]]), (b^4, a^-10, [[775, -78], [50, -5]])]

Matrix chosen: [[155, -39], [4, -1]] for number (278279, -6198933)

Matrix list sorted by distance from 0: [(b^10, a^10, [[391, 39], [10, 1]]), (b^10, a^9, [[352, 39], [9, 1]]), (b^10, a^8, [[313, 39], [8, 1]]), (b^10, a^7, [[274, 39], [7, 1]]), (b^10, a^6, [[235, 39], [6, 1]]), (b^10, a^5, [[196, 39], [5, 1]]), (b^10, a^4, [[157, 39], [4, 1]]), (b^10, a^3, [[118, 39], [3, 1]]), (b^10, a^2, [[79, 39], [2, 1]]), (b^10, a^1, [[40, 39], [1, 1]]), (b^10, a^-1, [[38, -39], [1, -1]]), (b^10, a^-2, [[77, -39], [2, -1]]), (b^10, a^-3, [[116, -39], [3, -1]]), (b^10, a^-4, [[155, -39], [4, -1]]), (b^10, a^-5, [[194, -39], [5, -1]]), (b^10, a^-6, [[233, -39], [6, -1]]), (b^10, a^-7, [[272, -39], [7, -1]]), (b^10, a^-8, [[311, -39], [8, -1]]), (b^10, a^-9, [[350, -39], [9, -1]]), (b^10, a^-10, [[389, -39], [10, -1]])]

Matrix chosen: [[275, -39], [-14, 2]] for number (278279, 4653948)

Matrix list sorted by distance from 0: [(b^-5, a^10, [[388, 39], [-20, -2]]), (b^-5, a^9, [[349, 39], [-18, -2]]), (b^-5, a^8, [[310, 39], [-16, -2]]), (b^-5, a^7, [[271, 39], [-14, -2]]), (b^-5, a^6, [[232, 39], [-12, -2]]), (b^-5, a^5, [[193, 39], [-10, -2]]), (b^-5, a^4, [[154, 39], [-8, -2]]), (b^-5, a^3, [[115, 39], [-6, -2]]), (b^-5, a^2, [[76, 39], [-4, -2]]), (b^-5, a^1, [[37, 39], [-2, -2]]), (b^-5, a^-1, [[41, -39], [-2, 2]]), (b^-5, a^-2, [[80, -39], [-4, 2]]), (b^-5, a^-3, [[119, -39], [-6, 2]]), (b^-5, a^-4, [[158, -39], [-8, 2]]), (b^-5, a^-5, [[197, -39], [-10, 2]]), (b^-5, a^-6, [[236, -39], [-12, 2]]), (b^-5, a^-7, [[275, -39], [-14, 2]]), (b^-5, a^-8, [[314, -39], [-16, 2]]), (b^-5, a^-9, [[353, -39], [-18, 2]]), (b^-5, a^-10, [[392, -39], [-20, 2]])]

Matrix chosen: [[122, 39], [15, 5]] for number (172583, -1563978)

Matrix list sorted by distance from 0: [(b^2, a^10, [[395, 39], [50, 5]]), (b^2, a^9, [[356, 39], [45, 5]]), (b^2, a^8, [[317, 39], [40, 5]]), (b^2, a^7, [[278, 39], [35, 5]]), (b^2, a^6, [[239, 39], [30, 5]]), (b^2, a^5, [[200, 39], [25, 5]]), (b^2, a^4, [[161, 39], [20, 5]]), (b^2, a^3, [[122, 39], [15, 5]]), (b^2, a^2, [[83, 39], [10, 5]]), (b^2, a^1, [[44, 39], [5, 5]]), (b^2, a^-1, [[34, -39], [5, -5]]), (b^2, a^-2, [[73, -39], [10, -5]]), (b^2, a^-3, [[112, -39], [15, -5]]), (b^2, a^-4, [[151, -39], [20, -5]]), (b^2, a^-5, [[190, -39], [25, -5]]), (b^2, a^-6, [[229, -39], [30, -5]]), (b^2, a^-7, [[268, -39], [35, -5]]), (b^2, a^-8, [[307, -39], [40, -5]]), (b^2, a^-9, [[346, -39], [45, -5]]), (b^2, a^-10, [[385, -39], [50, -5]])]

Matrix chosen: [[1043, 117], [-90, -10]] for number (48533, 517062)

Matrix list sorted by distance from 0: [(b^-3, a^10, [[1160, 117], [-100, -10]]), (b^-3, a^9, [[1043, 117], [-90, -10]]), (b^-3, a^8, [[926, 117], [-80, -10]]), (b^-3, a^7, [[809, 117], [-70, -10]]), (b^-3, a^6, [[692, 117], [-60, -10]]), (b^-3, a^5, [[575, 117], [-50, -10]]), (b^-3, a^4, [[458, 117], [-40, -10]]), (b^-3, a^3, [[341, 117], [-30, -10]]), (b^-3, a^2, [[224, 117], [-20, -10]]), (b^-3, a^1, [[107, 117], [-10, -10]]), (b^-3, a^-1, [[127, -117], [-10, 10]]), (b^-3, a^-2, [[244, -117], [-20, 10]]), (b^-3, a^-3, [[361, -117], [-30, 10]]), (b^-3, a^-4, [[478, -117], [-40, 10]]), (b^-3, a^-5, [[595, -117], [-50, 10]]), (b^-3, a^-6, [[712, -117], [-60, 10]]), (b^-3, a^-7, [[829, -117], [-70, 10]]), (b^-3, a^-8, [[946, -117], [-80, 10]]), (b^-3, a^-9, [[1063, -117], [-90, 10]]), (b^-3, a^-10, [[1180, -117], [-100, 10]])]

Matrix chosen: [[196, -39], [-5, 1]] for number (22411, 507741)

Matrix list sorted by distance from 0: [(b^-10, a^10, [[389, 39], [-10, -1]]), (b^-10, a^9, [[350, 39], [-9, -1]]), (b^-10, a^8, [[311, 39], [-8, -1]]), (b^-10, a^7, [[272, 39], [-7, -1]]), (b^-10, a^6, [[233, 39], [-6, -1]]), (b^-10, a^5, [[194, 39], [-5, -1]]), (b^-10, a^4, [[155, 39], [-4, -1]]), (b^-10, a^3, [[116, 39], [-3, -1]]), (b^-10, a^2, [[77, 39], [-2, -1]]), (b^-10, a^1, [[38, 39], [-1, -1]]), (b^-10, a^-1, [[40, -39], [-1, 1]]), (b^-10, a^-2, [[79, -39], [-2, 1]]), (b^-10, a^-3, [[118, -39], [-3, 1]]), (b^-10, a^-4, [[157, -39], [-4, 1]]), (b^-10, a^-5, [[196, -39], [-5, 1]]), (b^-10, a^-6, [[235, -39], [-6, 1]]), (b^-10, a^-7, [[274, -39], [-7, 1]]), (b^-10, a^-8, [[313, -39], [-8, 1]]), (b^-10, a^-9, [[352, -39], [-9, 1]]), (b^-10, a^-10, [[391, -39], [-10, 1]])]

Matrix chosen: [[193, -39], [10, -2]] for number (22411, -366288)

Matrix list sorted by distance from 0: [(b^5, a^10, [[392, 39], [20, 2]]), (b^5, a^9, [[353, 39], [18, 2]]), (b^5, a^8, [[314, 39], [16, 2]]), (b^5, a^7, [[275, 39], [14, 2]]), (b^5, a^6, [[236, 39], [12, 2]]), (b^5, a^5, [[197, 39], [10, 2]]), (b^5, a^4, [[158, 39], [8, 2]]), (b^5, a^3, [[119, 39], [6, 2]]), (b^5, a^2, [[80, 39], [4, 2]]), (b^5, a^1, [[41, 39], [2, 2]]), (b^5, a^-1, [[37, -39], [2, -2]]), (b^5, a^-2, [[76, -39], [4, -2]]), (b^5, a^-3, [[115, -39], [6, -2]]), (b^5, a^-4, [[154, -39], [8, -2]]), (b^5, a^-5, [[193, -39], [10, -2]]), (b^5, a^-6, [[232, -39], [12, -2]]), (b^5, a^-7, [[271, -39], [14, -2]]), (b^5, a^-8, [[310, -39], [16, -2]]), (b^5, a^-9, [[349, -39], [18, -2]]), (b^5, a^-10, [[388, -39], [20, -2]])]

Matrix chosen: [[235, -39], [-6, 1]] for number (2303, 284427)

Matrix list sorted by distance from 0: [(b^-10, a^10, [[389, 39], [-10, -1]]), (b^-10, a^9, [[350, 39], [-9, -1]]), (b^-10, a^8, [[311, 39], [-8, -1]]), (b^-10, a^7, [[272, 39], [-7, -1]]), (b^-10, a^6, [[233, 39], [-6, -1]]), (b^-10, a^5, [[194, 39], [-5, -1]]), (b^-10, a^4, [[155, 39], [-4, -1]]), (b^-10, a^3, [[116, 39], [-3, -1]]), (b^-10, a^2, [[77, 39], [-2, -1]]), (b^-10, a^1, [[38, 39], [-1, -1]]), (b^-10, a^-1, [[40, -39], [-1, 1]]), (b^-10, a^-2, [[79, -39], [-2, 1]]), (b^-10, a^-3, [[118, -39], [-3, 1]]), (b^-10, a^-4, [[157, -39], [-4, 1]]), (b^-10, a^-5, [[196, -39], [-5, 1]]), (b^-10, a^-6, [[235, -39], [-6, 1]]), (b^-10, a^-7, [[274, -39], [-7, 1]]), (b^-10, a^-8, [[313, -39], [-8, 1]]), (b^-10, a^-9, [[352, -39], [-9, 1]]), (b^-10, a^-10, [[391, -39], [-10, 1]])]

Matrix chosen: [[233, 39], [-6, -1]] for number (2303, 194610)

Matrix list sorted by distance from 0: [(b^-10, a^10, [[389, 39], [-10, -1]]), (b^-10, a^9, [[350, 39], [-9, -1]]), (b^-10, a^8, [[311, 39], [-8, -1]]), (b^-10, a^7, [[272, 39], [-7, -1]]), (b^-10, a^6, [[233, 39], [-6, -1]]), (b^-10, a^5, [[194, 39], [-5, -1]]), (b^-10, a^4, [[155, 39], [-4, -1]]), (b^-10, a^3, [[116, 39], [-3, -1]]), (b^-10, a^2, [[77, 39], [-2, -1]]), (b^-10, a^1, [[38, 39], [-1, -1]]), (b^-10, a^-1, [[40, -39], [-1, 1]]), (b^-10, a^-2, [[79, -39], [-2, 1]]), (b^-10, a^-3, [[118, -39], [-3, 1]]), (b^-10, a^-4, [[157, -39], [-4, 1]]), (b^-10, a^-5, [[196, -39], [-5, 1]]), (b^-10, a^-6, [[235, -39], [-6, 1]]), (b^-10, a^-7, [[274, -39], [-7, 1]]), (b^-10, a^-8, [[313, -39], [-8, 1]]), (b^-10, a^-9, [[352, -39], [-9, 1]]), (b^-10, a^-10, [[391, -39], [-10, 1]])]

Matrix chosen: [[40, -39], [-1, 1]] for number (2303, 104793)

Matrix list sorted by distance from 0: [(b^-10, a^10, [[389, 39], [-10, -1]]), (b^-10, a^9, [[350, 39], [-9, -1]]), (b^-10, a^8, [[311, 39], [-8, -1]]), (b^-10, a^7, [[272, 39], [-7, -1]]), (b^-10, a^6, [[233, 39], [-6, -1]]), (b^-10, a^5, [[194, 39], [-5, -1]]), (b^-10, a^4, [[155, 39], [-4, -1]]), (b^-10, a^3, [[116, 39], [-3, -1]]), (b^-10, a^2, [[77, 39], [-2, -1]]), (b^-10, a^1, [[38, 39], [-1, -1]]), (b^-10, a^-1, [[40, -39], [-1, 1]]), (b^-10, a^-2, [[79, -39], [-2, 1]]), (b^-10, a^-3, [[118, -39], [-3, 1]]), (b^-10, a^-4, [[157, -39], [-4, 1]]), (b^-10, a^-5, [[196, -39], [-5, 1]]), (b^-10, a^-6, [[235, -39], [-6, 1]]), (b^-10, a^-7, [[274, -39], [-7, 1]]), (b^-10, a^-8, [[313, -39], [-8, 1]]), (b^-10, a^-9, [[352, -39], [-9, 1]]), (b^-10, a^-10, [[391, -39], [-10, 1]])]

Matrix chosen: [[385, 39], [-50, -5]] for number (2303, 14976)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]])]

Matrix chosen: [[83, -39], [-10, 5]] for number (599, 3978)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]])]

Matrix chosen: [[34, 39], [-5, -5]] for number (476, 3471)

Matrix list sorted by distance from 0: [(b^-2, a^10, [[385, 39], [-50, -5]]), (b^-2, a^9, [[346, 39], [-45, -5]]), (b^-2, a^8, [[307, 39], [-40, -5]]), (b^-2, a^7, [[268, 39], [-35, -5]]), (b^-2, a^6, [[229, 39], [-30, -5]]), (b^-2, a^5, [[190, 39], [-25, -5]]), (b^-2, a^4, [[151, 39], [-20, -5]]), (b^-2, a^3, [[112, 39], [-15, -5]]), (b^-2, a^2, [[73, 39], [-10, -5]]), (b^-2, a^1, [[34, 39], [-5, -5]]), (b^-2, a^-1, [[44, -39], [-5, 5]]), (b^-2, a^-2, [[83, -39], [-10, 5]]), (b^-2, a^-3, [[122, -39], [-15, 5]]), (b^-2, a^-4, [[161, -39], [-20, 5]]), (b^-2, a^-5, [[200, -39], [-25, 5]]), (b^-2, a^-6, [[239, -39], [-30, 5]]), (b^-2, a^-7, [[278, -39], [-35, 5]]), (b^-2, a^-8, [[317, -39], [-40, 5]]), (b^-2, a^-9, [[356, -39], [-45, 5]]), (b^-2, a^-10, [[395, -39], [-50, 5]])]

Matrix chosen: [[193, 39], [-10, -2]] for number (38, 1209)

Matrix list sorted by distance from 0: [(b^-5, a^10, [[388, 39], [-20, -2]]), (b^-5, a^9, [[349, 39], [-18, -2]]), (b^-5, a^8, [[310, 39], [-16, -2]]), (b^-5, a^7, [[271, 39], [-14, -2]]), (b^-5, a^6, [[232, 39], [-12, -2]]), (b^-5, a^5, [[193, 39], [-10, -2]]), (b^-5, a^4, [[154, 39], [-8, -2]]), (b^-5, a^3, [[115, 39], [-6, -2]]), (b^-5, a^2, [[76, 39], [-4, -2]]), (b^-5, a^1, [[37, 39], [-2, -2]]), (b^-5, a^-1, [[41, -39], [-2, 2]]), (b^-5, a^-2, [[80, -39], [-4, 2]]), (b^-5, a^-3, [[119, -39], [-6, 2]]), (b^-5, a^-4, [[158, -39], [-8, 2]]), (b^-5, a^-5, [[197, -39], [-10, 2]]), (b^-5, a^-6, [[236, -39], [-12, 2]]), (b^-5, a^-7, [[275, -39], [-14, 2]]), (b^-5, a^-8, [[314, -39], [-16, 2]]), (b^-5, a^-9, [[353, -39], [-18, 2]]), (b^-5, a^-10, [[392, -39], [-20, 2]])]

Matrix chosen: [[127, -117], [-10, 10]] for number (19, 234)

Matrix list sorted by distance from 0: [(b^-3, a^10, [[1160, 117], [-100, -10]]), (b^-3, a^9, [[1043, 117], [-90, -10]]), (b^-3, a^8, [[926, 117], [-80, -10]]), (b^-3, a^7, [[809, 117], [-70, -10]]), (b^-3, a^6, [[692, 117], [-60, -10]]), (b^-3, a^5, [[575, 117], [-50, -10]]), (b^-3, a^4, [[458, 117], [-40, -10]]), (b^-3, a^3, [[341, 117], [-30, -10]]), (b^-3, a^2, [[224, 117], [-20, -10]]), (b^-3, a^1, [[107, 117], [-10, -10]]), (b^-3, a^-1, [[127, -117], [-10, 10]]), (b^-3, a^-3, [[361, -117], [-30, 10]]), (b^-3, a^-4, [[478, -117], [-40, 10]]), (b^-3, a^-5, [[595, -117], [-50, 10]]), (b^-3, a^-6, [[712, -117], [-60, 10]]), (b^-3, a^-7, [[829, -117], [-70, 10]]), (b^-3, a^-8, [[946, -117], [-80, 10]]), (b^-3, a^-9, [[1063, -117], [-90, 10]]), (b^-3, a^-10, [[1180, -117], [-100, 10]]), (b^-3, a^-2, [[244, -117], [-20, 10]])]

Matrix chosen: [[692, -117], [60, -10]] for number (113, -1443)

Matrix list sorted by distance from 0: [(b^3, a^10, [[1180, 117], [100, 10]]), (b^3, a^9, [[1063, 117], [90, 10]]), (b^3, a^8, [[946, 117], [80, 10]]), (b^3, a^7, [[829, 117], [70, 10]]), (b^3, a^6, [[712, 117], [60, 10]]), (b^3, a^5, [[595, 117], [50, 10]]), (b^3, a^4, [[478, 117], [40, 10]]), (b^3, a^3, [[361, 117], [30, 10]]), (b^3, a^2, [[244, 117], [20, 10]]), (b^3, a^1, [[127, 117], [10, 10]]), (b^3, a^-1, [[107, -117], [10, -10]]), (b^3, a^-2, [[224, -117], [20, -10]]), (b^3, a^-3, [[341, -117], [30, -10]]), (b^3, a^-4, [[458, -117], [40, -10]]), (b^3, a^-5, [[575, -117], [50, -10]]), (b^3, a^-6, [[692, -117], [60, -10]]), (b^3, a^-7, [[809, -117], [70, -10]]), (b^3, a^-8, [[926, -117], [80, -10]]), (b^3, a^-9, [[1043, -117], [90, -10]]), (b^3, a^-10, [[1160, -117], [100, -10]])]

Matrix chosen: [[197, -39], [-10, 2]] for number (79, 1209)

Matrix list sorted by distance from 0: [(b^-5, a^10, [[388, 39], [-20, -2]]), (b^-5, a^9, [[349, 39], [-18, -2]]), (b^-5, a^8, [[310, 39], [-16, -2]]), (b^-5, a^7, [[271, 39], [-14, -2]]), (b^-5, a^6, [[232, 39], [-12, -2]]), (b^-5, a^5, [[193, 39], [-10, -2]]), (b^-5, a^4, [[154, 39], [-8, -2]]), (b^-5, a^3, [[115, 39], [-6, -2]]), (b^-5, a^2, [[76, 39], [-4, -2]]), (b^-5, a^1, [[37, 39], [-2, -2]]), (b^-5, a^-1, [[41, -39], [-2, 2]]), (b^-5, a^-2, [[80, -39], [-4, 2]]), (b^-5, a^-3, [[119, -39], [-6, 2]]), (b^-5, a^-4, [[158, -39], [-8, 2]]), (b^-5, a^-5, [[197, -39], [-10, 2]]), (b^-5, a^-6, [[236, -39], [-12, 2]]), (b^-5, a^-7, [[275, -39], [-14, 2]]), (b^-5, a^-8, [[314, -39], [-16, 2]]), (b^-5, a^-9, [[353, -39], [-18, 2]]), (b^-5, a^-10, [[392, -39], [-20, 2]])]

Matrix chosen: [[224, -39], [60, -10]] for number (158, -663)

Matrix list sorted by distance from 0: [(b^1, a^10, [[400, 39], [100, 10]]), (b^1, a^9, [[361, 39], [90, 10]]), (b^1, a^8, [[322, 39], [80, 10]]), (b^1, a^7, [[283, 39], [70, 10]]), (b^1, a^6, [[244, 39], [60, 10]]), (b^1, a^5, [[205, 39], [50, 10]]), (b^1, a^4, [[166, 39], [40, 10]]), (b^1, a^2, [[88, 39], [20, 10]]), (b^1, a^1, [[49, 39], [10, 10]]), (b^1, a^-1, [[29, -39], [10, -10]]), (b^1, a^-2, [[68, -39], [20, -10]]), (b^1, a^-3, [[107, -39], [30, -10]]), (b^1, a^-4, [[146, -39], [40, -10]]), (b^1, a^-5, [[185, -39], [50, -10]]), (b^1, a^-6, [[224, -39], [60, -10]]), (b^1, a^-7, [[263, -39], [70, -10]]), (b^1, a^-8, [[302, -39], [80, -10]]), (b^1, a^-9, [[341, -39], [90, -10]]), (b^1, a^-10, [[380, -39], [100, -10]]), (b^1, a^3, [[127, 39], [30, 10]])]