

Projective Plane Random Walk Recurrence: 1000 Walks

SPUR 2016

August 12, 2016

At most 500000 steps
Starting Cell Cell('0', '0')

Walk #,	Returned,	Walk Length
(0,	True,	2),
(1,	True,	182),
(2,	True,	2),
(3,	True,	2),
(4,	False,	500000),
(5,	True,	2),
(6,	True,	223),
(7,	False,	500000),
(8,	True,	333),
(9,	False,	500000),
(10,	False,	500000),
(11,	False,	500000),
(12,	False,	500000),
(13,	True,	31),
(14,	True,	320),
(15,	False,	500000),
(16,	True,	8),
(17,	False,	500000),
(18,	False,	500000),
(19,	False,	500000),
(20,	True,	129),
(21,	False,	500000),
(22,	True,	2),
(23,	False,	500000),
(24,	True,	22),
(25,	False,	500000),
(26,	True,	2173),
(27,	True,	2),
(28,	False,	500000),

(29, True, 14),
(30, True, 10),
(31, False, 500000),
(32, True, 53),
(33, True, 2),
(34, True, 179),
(35, False, 500000),
(36, False, 500000),
(37, True, 24),
(38, True, 1037),
(39, True, 2),
(40, False, 500000),
(41, False, 500000),
(42, True, 2),
(43, True, 26),
(44, True, 2),
(45, True, 7),
(46, False, 500000),
(47, True, 2),
(48, True, 2),
(49, True, 2),
(50, True, 7823),
(51, True, 4),
(52, True, 37544),
(53, False, 500000),
(54, True, 6),
(55, True, 244),
(56, False, 500000),
(57, True, 344),
(58, True, 2662),
(59, True, 4403),
(60, True, 84),
(61, True, 8),
(62, False, 500000),
(63, True, 22),
(64, True, 523),
(65, False, 500000),
(66, False, 500000),
(67, True, 2),
(68, True, 2),
(69, True, 44),
(70, True, 6),
(71, True, 6),
(72, True, 12),
(73, True, 4),
(74, False, 500000),

(75, True, 68735),
(76, True, 101),
(77, True, 2),
(78, True, 16),
(79, True, 2),
(80, False, 500000),
(81, True, 2),
(82, True, 5295),
(83, True, 64),
(84, False, 500000),
(85, False, 500000),
(86, True, 2),
(87, True, 236),
(88, True, 2),
(89, False, 500000),
(90, True, 32582),
(91, False, 500000),
(92, False, 500000),
(93, True, 2),
(94, True, 26438),
(95, True, 5293),
(96, True, 16),
(97, False, 500000),
(98, True, 1362),
(99, True, 6),
(100, True, 302523),
(101, False, 500000),
(102, False, 500000),
(103, True, 2),
(104, True, 20),
(105, False, 500000),
(106, True, 421),
(107, True, 24),
(108, False, 500000),
(109, True, 2),
(110, True, 7),
(111, True, 2),
(112, True, 2),
(113, True, 37),
(114, True, 16),
(115, False, 500000),
(116, True, 310672),
(117, False, 500000),
(118, True, 3128),
(119, True, 2),
(120, True, 124),

(121, True, 12),
(122, True, 4),
(123, True, 6),
(124, True, 8),
(125, True, 8),
(126, True, 2),
(127, False, 500000),
(128, True, 2),
(129, True, 432),
(130, True, 2),
(131, True, 67434),
(132, True, 13),
(133, False, 500000),
(134, False, 500000),
(135, False, 500000),
(136, True, 2),
(137, True, 12),
(138, False, 500000),
(139, True, 2),
(140, True, 2),
(141, False, 500000),
(142, True, 6),
(143, False, 500000),
(144, True, 2),
(145, True, 9),
(146, True, 17),
(147, False, 500000),
(148, True, 2),
(149, True, 16),
(150, False, 500000),
(151, True, 2),
(152, False, 500000),
(153, False, 500000),
(154, False, 500000),
(155, True, 218686),
(156, True, 2),
(157, True, 55),
(158, False, 500000),
(159, False, 500000),
(160, True, 1232),
(161, True, 41698),
(162, True, 2),
(163, True, 17),
(164, False, 500000),
(165, True, 57),
(166, True, 21),

(167, True, 2),
(168, False, 500000),
(169, True, 6),
(170, True, 35),
(171, False, 500000),
(172, True, 2),
(173, False, 500000),
(174, True, 2),
(175, False, 500000),
(176, False, 500000),
(177, True, 12),
(178, True, 8),
(179, False, 500000),
(180, True, 39),
(181, True, 164),
(182, True, 2),
(183, False, 500000),
(184, True, 2),
(185, True, 2),
(186, True, 6),
(187, True, 2),
(188, True, 2),
(189, True, 2),
(190, True, 2),
(191, False, 500000),
(192, False, 500000),
(193, False, 500000),
(194, False, 500000),
(195, True, 30),
(196, True, 2),
(197, True, 304650),
(198, True, 2),
(199, False, 500000),
(200, False, 500000),
(201, False, 500000),
(202, False, 500000),
(203, True, 6),
(204, True, 140),
(205, True, 11),
(206, True, 2),
(207, True, 10),
(208, True, 4),
(209, False, 500000),
(210, True, 86),
(211, True, 9),
(212, True, 2),

(213, True, 6),
(214, True, 30),
(215, True, 72822),
(216, False, 500000),
(217, True, 2),
(218, True, 21),
(219, False, 500000),
(220, True, 118263),
(221, True, 53),
(222, True, 15),
(223, True, 11248),
(224, True, 2),
(225, True, 68),
(226, True, 2397),
(227, True, 195),
(228, True, 73),
(229, True, 14820),
(230, True, 4),
(231, False, 500000),
(232, False, 500000),
(233, True, 6),
(234, True, 2),
(235, False, 500000),
(236, True, 4),
(237, True, 2),
(238, False, 500000),
(239, True, 20),
(240, False, 500000),
(241, True, 4),
(242, False, 500000),
(243, False, 500000),
(244, True, 4),
(245, False, 500000),
(246, False, 500000),
(247, True, 11),
(248, False, 500000),
(249, False, 500000),
(250, True, 501),
(251, True, 2),
(252, True, 489),
(253, True, 29),
(254, False, 500000),
(255, True, 10),
(256, True, 2),
(257, False, 500000),
(258, False, 500000),

(259, False, 500000),
(260, True, 6),
(261, False, 500000),
(262, False, 500000),
(263, False, 500000),
(264, True, 2),
(265, True, 2),
(266, True, 12),
(267, True, 25),
(268, False, 500000),
(269, True, 2),
(270, False, 500000),
(271, False, 500000),
(272, True, 9),
(273, False, 500000),
(274, True, 929),
(275, True, 2),
(276, True, 16),
(277, True, 8),
(278, True, 2360),
(279, False, 500000),
(280, False, 500000),
(281, False, 500000),
(282, True, 42),
(283, False, 500000),
(284, False, 500000),
(285, True, 2),
(286, False, 500000),
(287, False, 500000),
(288, False, 500000),
(289, True, 102),
(290, True, 14),
(291, True, 6083),
(292, False, 500000),
(293, True, 20831),
(294, True, 20),
(295, True, 16),
(296, False, 500000),
(297, True, 8),
(298, True, 193),
(299, True, 2),
(300, True, 4),
(301, True, 4),
(302, True, 8),
(303, True, 485),
(304, True, 2),

(305, True, 64),
(306, False, 500000),
(307, True, 2),
(308, True, 40),
(309, False, 500000),
(310, True, 2),
(311, True, 44),
(312, False, 500000),
(313, True, 2),
(314, True, 29),
(315, False, 500000),
(316, False, 500000),
(317, False, 500000),
(318, True, 23),
(319, True, 5942),
(320, True, 2),
(321, True, 153),
(322, True, 16),
(323, True, 2471),
(324, False, 500000),
(325, True, 2),
(326, False, 500000),
(327, True, 11),
(328, True, 2),
(329, True, 1532),
(330, True, 7913),
(331, False, 500000),
(332, True, 46909),
(333, True, 2),
(334, True, 2),
(335, True, 3512),
(336, False, 500000),
(337, False, 500000),
(338, False, 500000),
(339, False, 500000),
(340, True, 9343),
(341, False, 500000),
(342, True, 16),
(343, True, 2),
(344, False, 500000),
(345, False, 500000),
(346, False, 500000),
(347, True, 457),
(348, True, 59475),
(349, True, 2),
(350, True, 4),

(351, False, 500000),
(352, False, 500000),
(353, True, 51039),
(354, True, 14664),
(355, False, 500000),
(356, True, 2),
(357, True, 2),
(358, True, 211),
(359, True, 33),
(360, True, 2),
(361, True, 424),
(362, True, 2),
(363, False, 500000),
(364, False, 500000),
(365, True, 2),
(366, False, 500000),
(367, False, 500000),
(368, True, 2),
(369, True, 2),
(370, True, 227),
(371, True, 4),
(372, True, 2),
(373, True, 6),
(374, True, 2),
(375, False, 500000),
(376, True, 15),
(377, True, 2),
(378, True, 2),
(379, False, 500000),
(380, False, 500000),
(381, True, 2),
(382, False, 500000),
(383, True, 2),
(384, True, 2),
(385, True, 2),
(386, True, 2),
(387, True, 2),
(388, True, 2),
(389, False, 500000),
(390, True, 9),
(391, True, 35),
(392, False, 500000),
(393, True, 4),
(394, True, 4195),
(395, True, 20),
(396, False, 500000),

(397, False, 500000),
(398, True, 8),
(399, True, 128),
(400, False, 500000),
(401, True, 2),
(402, True, 5534),
(403, False, 500000),
(404, False, 500000),
(405, True, 4),
(406, True, 5),
(407, True, 6),
(408, False, 500000),
(409, False, 500000),
(410, False, 500000),
(411, True, 22),
(412, True, 2),
(413, True, 2016),
(414, True, 2),
(415, True, 2),
(416, True, 2),
(417, False, 500000),
(418, True, 77),
(419, True, 4),
(420, True, 171805),
(421, True, 4522),
(422, False, 500000),
(423, True, 4),
(424, False, 500000),
(425, True, 2),
(426, True, 2),
(427, True, 2),
(428, True, 4),
(429, True, 2),
(430, True, 102),
(431, False, 500000),
(432, True, 2),
(433, True, 25),
(434, True, 703),
(435, True, 2),
(436, True, 350),
(437, False, 500000),
(438, True, 2),
(439, True, 2),
(440, False, 500000),
(441, True, 2),
(442, False, 500000),

(443, True, 341),
(444, True, 4),
(445, True, 6),
(446, True, 2),
(447, True, 2),
(448, False, 500000),
(449, True, 2),
(450, False, 500000),
(451, True, 9),
(452, False, 500000),
(453, True, 143),
(454, True, 9),
(455, True, 97),
(456, True, 6),
(457, True, 170),
(458, True, 1830),
(459, True, 45),
(460, True, 491),
(461, True, 12),
(462, True, 2),
(463, False, 500000),
(464, True, 12),
(465, False, 500000),
(466, True, 59836),
(467, False, 500000),
(468, True, 146),
(469, True, 1558),
(470, True, 32),
(471, False, 500000),
(472, True, 4),
(473, False, 500000),
(474, True, 72),
(475, True, 4599),
(476, True, 4),
(477, True, 6),
(478, True, 12),
(479, True, 393388),
(480, False, 500000),
(481, True, 44),
(482, True, 2),
(483, False, 500000),
(484, True, 12),
(485, True, 2),
(486, False, 500000),
(487, False, 500000),
(488, False, 500000),

(489, True, 2),
(490, False, 500000),
(491, True, 4),
(492, True, 9806),
(493, True, 2),
(494, False, 500000),
(495, True, 27),
(496, True, 2),
(497, True, 39476),
(498, False, 500000),
(499, True, 4),
(500, True, 6),
(501, False, 500000),
(502, True, 3025),
(503, True, 113),
(504, True, 2),
(505, True, 12),
(506, True, 2),
(507, True, 4108),
(508, True, 110),
(509, False, 500000),
(510, True, 24),
(511, False, 500000),
(512, True, 11767),
(513, False, 500000),
(514, True, 78239),
(515, True, 4),
(516, False, 500000),
(517, True, 6),
(518, True, 2),
(519, True, 29301),
(520, True, 74),
(521, True, 2),
(522, True, 7),
(523, True, 211),
(524, False, 500000),
(525, True, 189),
(526, True, 6),
(527, False, 500000),
(528, True, 104),
(529, True, 14),
(530, True, 2),
(531, True, 2),
(532, True, 245),
(533, True, 7906),
(534, True, 322),

(535, True, 69209),
(536, False, 500000),
(537, True, 4),
(538, True, 2),
(539, True, 4898),
(540, True, 2),
(541, True, 2437),
(542, True, 2),
(543, False, 500000),
(544, False, 500000),
(545, True, 2),
(546, True, 2),
(547, True, 2386),
(548, True, 6),
(549, False, 500000),
(550, False, 500000),
(551, True, 4),
(552, False, 500000),
(553, True, 114),
(554, True, 2),
(555, True, 4),
(556, True, 2),
(557, True, 10),
(558, True, 2),
(559, True, 2),
(560, False, 500000),
(561, False, 500000),
(562, False, 500000),
(563, True, 4),
(564, True, 4),
(565, True, 7462),
(566, False, 500000),
(567, True, 2),
(568, True, 15),
(569, True, 50),
(570, False, 500000),
(571, True, 6863),
(572, False, 500000),
(573, True, 2771),
(574, False, 500000),
(575, True, 2),
(576, True, 37),
(577, False, 500000),
(578, True, 2),
(579, True, 11700),
(580, True, 3795),

(581, False, 500000),
(582, True, 2),
(583, True, 166),
(584, True, 12),
(585, True, 2),
(586, True, 2),
(587, True, 179),
(588, True, 2),
(589, False, 500000),
(590, False, 500000),
(591, True, 16),
(592, False, 500000),
(593, True, 59493),
(594, True, 90),
(595, True, 4),
(596, True, 47675),
(597, True, 4),
(598, True, 10),
(599, False, 500000),
(600, True, 2),
(601, True, 35715),
(602, True, 62),
(603, False, 500000),
(604, True, 2),
(605, False, 500000),
(606, True, 1728),
(607, True, 30),
(608, True, 2),
(609, False, 500000),
(610, False, 500000),
(611, True, 2),
(612, True, 2),
(613, True, 787),
(614, True, 665),
(615, True, 1380),
(616, False, 500000),
(617, False, 500000),
(618, True, 2),
(619, True, 2),
(620, False, 500000),
(621, True, 2125),
(622, True, 44),
(623, False, 500000),
(624, True, 11),
(625, True, 11815),
(626, True, 2),

(627, False, 500000),
(628, False, 500000),
(629, False, 500000),
(630, True, 3612),
(631, False, 500000),
(632, True, 7),
(633, False, 500000),
(634, False, 500000),
(635, False, 500000),
(636, True, 2),
(637, True, 32),
(638, True, 4),
(639, True, 85),
(640, False, 500000),
(641, False, 500000),
(642, True, 2),
(643, True, 2),
(644, True, 43),
(645, True, 2),
(646, False, 500000),
(647, True, 4),
(648, False, 500000),
(649, True, 715),
(650, True, 107169),
(651, True, 22),
(652, False, 500000),
(653, True, 2),
(654, True, 2),
(655, False, 500000),
(656, False, 500000),
(657, True, 4),
(658, True, 2043),
(659, False, 500000),
(660, False, 500000),
(661, False, 500000),
(662, True, 14),
(663, True, 4),
(664, True, 2),
(665, True, 2),
(666, True, 18),
(667, False, 500000),
(668, False, 500000),
(669, True, 3892),
(670, False, 500000),
(671, False, 500000),
(672, True, 65),

(673, True, 2),
(674, True, 2),
(675, True, 10),
(676, True, 15),
(677, False, 500000),
(678, True, 4),
(679, True, 4),
(680, True, 69),
(681, False, 500000),
(682, True, 12),
(683, True, 2),
(684, True, 2),
(685, True, 2),
(686, False, 500000),
(687, True, 10),
(688, True, 2),
(689, True, 2),
(690, True, 75),
(691, False, 500000),
(692, True, 2),
(693, True, 6),
(694, True, 51),
(695, True, 2),
(696, True, 2),
(697, True, 245),
(698, False, 500000),
(699, True, 141),
(700, False, 500000),
(701, True, 60),
(702, False, 500000),
(703, True, 43),
(704, False, 500000),
(705, True, 4),
(706, False, 500000),
(707, True, 2),
(708, False, 500000),
(709, True, 2),
(710, True, 21),
(711, True, 2),
(712, True, 28),
(713, False, 500000),
(714, True, 44),
(715, True, 2),
(716, True, 131244),
(717, True, 6),
(718, True, 7853),

(719, True, 255),
(720, True, 35),
(721, False, 500000),
(722, True, 2),
(723, True, 14),
(724, True, 194),
(725, True, 2),
(726, False, 500000),
(727, False, 500000),
(728, False, 500000),
(729, True, 2),
(730, True, 2),
(731, True, 4),
(732, True, 2),
(733, True, 2),
(734, True, 4),
(735, True, 317),
(736, True, 1872),
(737, True, 2),
(738, True, 190),
(739, True, 954),
(740, True, 2),
(741, False, 500000),
(742, True, 10),
(743, True, 2),
(744, True, 20745),
(745, True, 19),
(746, True, 100),
(747, True, 2),
(748, True, 2),
(749, False, 500000),
(750, False, 500000),
(751, False, 500000),
(752, True, 10),
(753, False, 500000),
(754, False, 500000),
(755, True, 4),
(756, True, 23),
(757, True, 102),
(758, False, 500000),
(759, True, 6),
(760, True, 14),
(761, False, 500000),
(762, True, 199),
(763, False, 500000),
(764, True, 2),

(765, True, 6),
(766, True, 4),
(767, True, 152),
(768, True, 4),
(769, True, 23),
(770, False, 500000),
(771, True, 2),
(772, True, 467),
(773, True, 2),
(774, False, 500000),
(775, True, 28),
(776, False, 500000),
(777, False, 500000),
(778, True, 2),
(779, False, 500000),
(780, False, 500000),
(781, True, 347),
(782, True, 2),
(783, False, 500000),
(784, True, 2),
(785, True, 2),
(786, True, 4),
(787, True, 2),
(788, False, 500000),
(789, True, 1080),
(790, False, 500000),
(791, True, 35369),
(792, False, 500000),
(793, True, 4),
(794, False, 500000),
(795, True, 2),
(796, True, 2),
(797, True, 2),
(798, True, 8),
(799, False, 500000),
(800, False, 500000),
(801, False, 500000),
(802, True, 2),
(803, True, 2),
(804, True, 2),
(805, False, 500000),
(806, False, 500000),
(807, True, 144100),
(808, True, 2),
(809, True, 12),
(810, True, 2),

(811, True, 2),
(812, True, 2),
(813, True, 2),
(814, True, 1347),
(815, True, 2),
(816, True, 4),
(817, True, 78531),
(818, True, 617),
(819, True, 14),
(820, True, 102),
(821, True, 2),
(822, True, 2),
(823, False, 500000),
(824, False, 500000),
(825, True, 32),
(826, True, 2),
(827, True, 2),
(828, False, 500000),
(829, True, 92),
(830, True, 2),
(831, True, 2),
(832, False, 500000),
(833, False, 500000),
(834, True, 8),
(835, True, 6),
(836, True, 68),
(837, True, 227),
(838, True, 2),
(839, True, 1307),
(840, True, 157748),
(841, True, 2),
(842, True, 234),
(843, True, 53),
(844, True, 70),
(845, False, 500000),
(846, True, 3407),
(847, False, 500000),
(848, True, 689),
(849, True, 4),
(850, True, 2),
(851, True, 154),
(852, True, 2),
(853, True, 3131),
(854, True, 2),
(855, False, 500000),
(856, True, 4),

(857, False, 500000),
(858, True, 34),
(859, False, 500000),
(860, True, 10),
(861, False, 500000),
(862, False, 500000),
(863, True, 9750),
(864, True, 2),
(865, False, 500000),
(866, True, 4),
(867, True, 15636),
(868, True, 8),
(869, False, 500000),
(870, True, 2),
(871, True, 93),
(872, False, 500000),
(873, False, 500000),
(874, True, 2),
(875, False, 500000),
(876, True, 83),
(877, False, 500000),
(878, True, 31),
(879, False, 500000),
(880, False, 500000),
(881, False, 500000),
(882, False, 500000),
(883, False, 500000),
(884, True, 2),
(885, False, 500000),
(886, True, 4),
(887, True, 10),
(888, False, 500000),
(889, True, 49381),
(890, True, 184),
(891, False, 500000),
(892, False, 500000),
(893, True, 2),
(894, True, 2),
(895, True, 860),
(896, True, 25267),
(897, True, 73),
(898, True, 81027),
(899, True, 21570),
(900, True, 5577),
(901, True, 65),
(902, False, 500000),

(903, False, 500000),
(904, False, 500000),
(905, True, 84),
(906, False, 500000),
(907, True, 314),
(908, True, 7),
(909, True, 330957),
(910, True, 4),
(911, True, 30),
(912, True, 4),
(913, True, 4),
(914, True, 2),
(915, False, 500000),
(916, True, 2),
(917, True, 2),
(918, False, 500000),
(919, True, 2),
(920, False, 500000),
(921, False, 500000),
(922, True, 31),
(923, False, 500000),
(924, True, 2),
(925, True, 13),
(926, True, 602),
(927, True, 15),
(928, True, 320),
(929, False, 500000),
(930, False, 500000),
(931, True, 264692),
(932, True, 450),
(933, False, 500000),
(934, True, 6055),
(935, True, 32),
(936, False, 500000),
(937, True, 2),
(938, False, 500000),
(939, False, 500000),
(940, False, 500000),
(941, True, 16),
(942, False, 500000),
(943, True, 17),
(944, False, 500000),
(945, True, 5),
(946, True, 221),
(947, True, 2),
(948, False, 500000),

(949, True, 4),
(950, True, 2),
(951, True, 12),
(952, False, 500000),
(953, False, 500000),
(954, True, 45098),
(955, False, 500000),
(956, True, 4),
(957, True, 2),
(958, True, 2),
(959, True, 4061),
(960, False, 500000),
(961, True, 2),
(962, False, 500000),
(963, True, 8),
(964, True, 425),
(965, True, 281),
(966, True, 2),
(967, True, 218304),
(968, False, 500000),
(969, False, 500000),
(970, True, 40),
(971, True, 19),
(972, True, 2),
(973, True, 2),
(974, True, 2),
(975, True, 8),
(976, True, 2),
(977, True, 2),
(978, True, 139),
(979, False, 500000),
(980, False, 500000),
(981, True, 2),
(982, True, 4),
(983, False, 500000),
(984, True, 345),
(985, True, 4),
(986, True, 92),
(987, True, 783),
(988, True, 4),
(989, True, 8),
(990, False, 500000),
(991, True, 13),
(992, True, 2),
(993, True, 16),
(994, True, 13359),

```
( 995, True, 4),
( 996, True, 5),
( 997, True, 18),
( 998, True, 2),
( 999, True, 2),
```

Total number of recurrent walks: 683

Lengths of recurrent walks: [2, 2, 2, 2, 182, 223, 333, 31, 320, 8, 129, 2, 22, 2173, 2, 14, 10, 53, 2, 179, 24, 2, 1037, 2, 26, 2, 7, 2, 2, 2, 4, 7823, 6, 244, 37544, 344, 2662, 4403, 84, 8, 22, 523, 2, 2, 44, 6, 6, 12, 4, 101, 2, 16, 2, 68735, 2, 5295, 64, 2, 236, 2, 32582, 2, 5293, 16, 26438, 1362, 6, 2, 20, 421, 24, 302523, 2, 7, 2, 2, 37, 16, 3128, 2, 124, 12, 4, 6, 8, 8, 2, 310672, 2, 432, 2, 13, 67434, 2, 12, 2, 2, 6, 2, 9, 17, 2, 16, 2, 2, 55, 218686, 1232, 2, 17, 41698, 57, 21, 2, 6, 35, 2, 2, 12, 8, 39, 164, 2, 2, 2, 6, 2, 2, 2, 30, 2, 2, 304650, 6, 140, 11, 2, 10, 4, 86, 9, 2, 6, 30, 72822, 2, 21, 53, 15, 2, 68, 2397, 195, 73, 11248, 4, 14820, 118263, 6, 2, 4, 2, 20, 4, 4, 11, 501, 2, 489, 29, 10, 2, 6, 2, 2, 12, 25, 2, 9, 929, 2, 16, 8, 2360, 42, 2, 102, 14, 6083, 20, 16, 20831, 8, 193, 2, 4, 4, 8, 485, 2, 64, 2, 40, 2, 44, 2, 29, 23, 2, 153, 16, 5942, 2471, 2, 11, 2, 1532, 7913, 46909, 2, 2, 3512, 9343, 16, 2, 457, 2, 4, 59475, 14664, 51039, 2, 2, 211, 33, 2, 424, 2, 2, 2, 2, 227, 4, 2, 6, 2, 15, 2, 2, 2, 2, 2, 2, 2, 9, 35, 4, 4195, 20, 8, 128, 2, 5534, 4, 5, 6, 22, 2, 2016, 2, 2, 2, 77, 4, 4522, 4, 2, 2, 2, 4, 2, 102, 2, 25, 171805, 2, 350, 703, 2, 2, 2, 341, 4, 6, 2, 2, 2, 9, 143, 9, 97, 6, 170, 45, 1830, 12, 2, 491, 12, 59836, 146, 1558, 32, 4, 72, 4599, 4, 6, 12, 44, 2, 12, 2, 393388, 2, 4, 9806, 2, 27, 2, 4, 6, 3025, 113, 2, 12, 2, 39476, 4108, 110, 24, 11767, 78239, 4, 6, 2, 74, 29301, 2, 7, 211, 189, 6, 14, 104, 2, 2, 245, 322, 7906, 4, 2, 4898, 2, 2437, 2, 69209, 2, 2, 2386, 6, 4, 114, 2, 4, 2, 10, 2, 2, 4, 4, 7462, 2, 15, 50, 6863, 2771, 2, 37, 2, 3795, 11700, 2, 166, 12, 2, 2, 2, 179, 16, 90, 4, 4, 59493, 10, 47675, 2, 62, 2, 35715, 1728, 30, 2, 2, 2, 787, 665, 1380, 2, 2, 2125, 44, 11, 2, 11815, 3612, 7, 2, 32, 4, 85, 2, 2, 43, 2, 4, 715, 22, 107169, 2, 2, 4, 2043, 14, 4, 2, 2, 18, 3892, 65, 2, 2, 10, 15, 4, 4, 69, 12, 2, 2, 2, 10, 2, 2, 75, 2, 6, 51, 2, 2, 245, 141, 60, 43, 4, 2, 2, 21, 2, 28, 44, 2, 6, 7853, 255, 35, 2, 14, 194, 2, 131244, 2, 2, 4, 2, 2, 4, 317, 2, 190, 954, 1872, 2, 10, 2, 19, 100, 2, 2, 20745, 10, 4, 23, 102, 6, 14, 199, 2, 6, 4, 152, 4, 23, 2, 467, 2, 28, 2, 347, 2, 2, 2, 4, 2, 1080, 35369, 4, 2, 2, 2, 8, 2, 2, 2, 2, 12, 2, 2, 2, 2, 1347, 2, 4, 78531, 617, 14, 102, 2, 2, 144100, 32, 2, 2, 92, 2, 2, 8, 6, 68, 227, 2, 1307, 2, 234, 53, 70, 3407, 689, 4, 2, 154, 2, 3131, 2, 157748, 4, 34, 10, 9750, 2, 4, 8, 15636, 2, 93, 2, 83, 31, 2, 4, 10, 49381, 184, 2, 2, 860, 73, 25267, 21570, 65, 5577, 81027, 84, 314, 7, 4, 30, 4, 4, 2, 2, 2, 2, 31, 330957, 2, 13, 602, 15, 320, 450, 6055, 32, 2, 264692, 16, 17, 5, 221, 2, 4, 2, 12, 45098, 4, 2, 2, 4061, 2, 8, 425, 281, 2, 40, 19, 2, 2, 2, 8, 2, 2, 139, 218304, 2, 4, 345, 4, 92, 783, 4, 8, 13, 2, 16, 13359, 5, 4, 18, 2, 2]

Endpoints of non-recurrent walks: [Cell('220210112', '201200001'), Cell('202022201', '212210022'), Cell('202010112', '210100000'), Cell('220001000', '220122121'), Cell('210002200', '221201212'), Cell('210102002', '122220021'), Cell('202100010', '120212120'), Cell('20222110022', '20220000221'), Cell('201020020', '200001200'), Cell('212011000', '221200200'), Cell('211200000', '200122110'), Cell('222000021', '201102212'), Cell('220020021', '220020010'), Cell('201000110', '200222022'), Cell('200220021', '120102200'), Cell('211010022',

'122020201'), Cell('201201202', '210002020'), Cell('201201120', '202120201'), Cell('210002210', '200000122'), Cell('210022022', '200102211'), Cell('112120000', '202220112'), Cell('201011212', '200222202'), Cell('100120202', '022210201'), Cell('220011020', '212100201'), Cell('122020210', '200112122'), Cell('122221000', '200212212'), Cell('201210000', '200002000'), Cell('212100000', '221001011'), Cell('210020220', '122021011'), Cell('21000120100', '20222002011'), Cell('212102212', '220221101'), Cell('202200211', '210211200'), Cell('202020210', '211200121'), Cell('122210221', '201121200'), Cell('200021012', '201120000'), Cell('212201122', '200220220'), Cell('222012211', '220102122'), Cell('202010000', '202121220'), Cell('211011200', '222122222'), Cell('202220202', '122110102'), Cell('0211202', '2122210'), Cell('210200020', '201001201'), Cell('200221020', '202122020'), Cell('122101002', '210220112'), Cell('220021112', '220212000'), Cell('022200022', '100002212'), Cell('200002112', '200012020'), Cell('201022112', '202010221'), Cell('200020002', '202121011'), Cell('100102000', '022202211'), Cell('120220002', '201012002'), Cell('212121120', '201000220'), Cell('202212000', '201002210'), Cell('122222222', '210012001'), Cell('200120022', '201011201'), Cell('211011001', '202120000'), Cell('012102002', '100201020'), Cell('022202110', '020002222'), Cell('212010011', '222000120'), Cell('221212200', '120220121'), Cell('200010221', '210021212'), Cell('212022102', '121120012'), Cell('122222101', '2022111002'), Cell('211011022', '200000020'), Cell('200102202', '220002121'), Cell('200101010', '121010100'), Cell('202002202', '201112211'), Cell('121221220', '200202002'), Cell('0222012', '1002002'), Cell('200020100', '122200000'), Cell('200221220', '121020121'), Cell('211210002', '122201101'), Cell('201222021', '210020112'), Cell('211000100', '200002020'), Cell('212200220', '221102121'), Cell('202000221', '222012220'), Cell('212121111', '201220222'), Cell('210101000', '202010021'), Cell('022021000', '022122120'), Cell('202100102', '202220010'), Cell('222021212', '212020122'), Cell('200012210', '121122120'), Cell('200202021', '120100022'), Cell('201020101', '202020200'), Cell('212100000', '220022110'), Cell('210000102', '201010220'), Cell('220012001', '202201200'), Cell('210120222', '200201220'), Cell('100112020', '022020122'), Cell('221002002', '210122101'), Cell('210020022', '200221102'), Cell('220021102', '200110210'), Cell('202022112', '211220200'), Cell('212100202', '221002010'), Cell('200001020', '201010002'), Cell('220000022', '102212122'), Cell('201222001', '212011212'), Cell('200100022', '212012201'), Cell('200021210', '212102020'), Cell('201112221', '210002000'), Cell('200220202', '201100111'), Cell('200202020', '202011122'), Cell('212200102', '200021011'), Cell('122021120', '210012022'), Cell('202202110', '200110220'), Cell('200121210', '210200220'), Cell('122222210', '210122222'), Cell('210211210', '220002002'), Cell('202122210', '210200122'), Cell('200202110', '212000222'), Cell('210100121', '201220022'), Cell('202120220', '211212211'), Cell('211201200', '222022212'), Cell('122212202', '201222000'), Cell('212200002', '202110120'), Cell('220022100', '211220011'), Cell('202221212', '202110121'), Cell('221002202', '220010222'), Cell('122221001', '210200002'), Cell('201221212', '210010020'), Cell('200002211', '210021122'), Cell('202202111', '201100222'), Cell('202100001', '200201100'), Cell('122200221', '211011002'), Cell('202110002', '200200221'), Cell('200210010', '200220221'), Cell('220011201', '220022100'), Cell('210120122', '121212212'), Cell('200001201', '210022220'), Cell('202112221', '211020122'), Cell('202200222', '201202201'), Cell('20220000022', '20222121210'), Cell('201120222', '122222111'), Cell('201221210', '122120000'), Cell('221202122', '210120211'), Cell('210011212', '202022020'), Cell('202220200', '202111020'), Cell('201020100', '122122201'), Cell('122021022', '201122121'), Cell('202211100', '200220210'), Cell('220201110', '220100000'), Cell('200022202', '212121010'), Cell('100202010', '022201101'), Cell('202010201', '212222200'), Cell('200111010', '202002222'), Cell('201002022', '200000021'), Cell('202121222', '211210010'), Cell('221021021', '220022002'), Cell('220210212', '200121002'), Cell('222010021', '212222010'), Cell('200022120', '201211211'), Cell('102111100',

'012222001'), Cell('202201011', '122220202'), Cell('220222020', '221002201'), Cell('211210222',
 '122120100'), Cell('220112110', '212000200'), Cell('122122112', '200020200'), Cell('122200101',
 '200100220'), Cell('200012012', '210102122'), Cell('222100222', '211210021'), Cell('210022010',
 '221122001'), Cell('210020220', '122102211'), Cell('212102202', '202222000'), Cell('201212101',
 '200101022'), Cell('201102000', '212012112'), Cell('220122200', '212020020'), Cell('210020002',
 '120112201'), Cell('200222200', '112121122'), Cell('201000010', '122221222'), Cell('212000020',
 '200020020'), Cell('21000000100', '20202110212'), Cell('200221102', '210110010'),
 Cell('202002222', '200112220'), Cell('202022100', '211101000'), Cell('20212222212',
 '2020021121'), Cell('212020200', '201212011'), Cell('201220110', '202220021'),
 Cell('201212111', '122201202'), Cell('202000002', '202110110'), Cell('222121220',
 '211212010'), Cell('202222221', '201002200'), Cell('101201212', '020210222'), Cell('210121011',
 '202002000'), Cell('202220200', '221010100'), Cell('121200201', '200020110'), Cell('201022100',
 '202202210'), Cell('220002220', '211220101'), Cell('122212010', '210201221'), Cell('210111100',
 '200220010'), Cell('220110221', '211220122'), Cell('010221221', '100212020'), Cell('200002000',
 '202110002'), Cell('122200002', '211111100'), Cell('200210210', '201221200'), Cell('202001220',
 '210200001'), Cell('122110200', '202000010'), Cell('220101100', '212212000'), Cell('202022002',
 '210202222'), Cell('211022000', '202212122'), Cell('120222202', '201120021'), Cell('0222020',
 '1212010'), Cell('211221002', '200110010'), Cell('202002201', '112010002'), Cell('201001122',
 '202220212'), Cell('201211101', '210220010'), Cell('210222110', '201020200'), Cell('201222020',
 '202111121'), Cell('201021002', '122200202'), Cell('121221002', '200100000'), Cell('211101222',
 '202202001'), Cell('200002020', '201010010'), Cell('201200102', '122102220'), Cell('200222222',
 '202101122'), Cell('201001022', '202010221'), Cell('121002120', '200121022'), Cell('120100120',
 '210021021'), Cell('200012212', '201222122'), Cell('122001112', '202220200'), Cell('202000002',
 '201112012'), Cell('200120102', '211201212'), Cell('210101212', '202200220'), Cell('222012221',
 '221002102'), Cell('121110220', '202201200'), Cell('021200022', '120011011'), Cell('202020101',
 '212021210'), Cell('220002122', '220202210'), Cell('221012001', '212122102'), Cell('121020221',
 '200202212'), Cell('201120101', '122010212'), Cell('201111002', '120202112'), Cell('202100002',
 '122201002'), Cell('220201222', '221022010'), Cell('201201001', '202010220'), Cell('122222012',
 '200200122'), Cell('100121022', '022212111'), Cell('212112121', '202002000'), Cell('210000200',
 '222120101'), Cell('202020221', '122022010'), Cell('220221110', '210022220'), Cell('200120122',
 '112220002'), Cell('122021020', '211112022'), Cell('200022200', '220021222'), Cell('211012122',
 '200002021'), Cell('200221000', '120202110'), Cell('210222120', '122101220'), Cell('211112000',
 '200222022'), Cell('200002100', '202022200'), Cell('201110020', '210020210'), Cell('122220122',
 '201201021'), Cell('210101210', '201000022'), Cell('202001022', '210222020'), Cell('202120101',
 '221010010'), Cell('120201022', '200200101'), Cell('212110122', '200202000'), Cell('202222212',
 '212000222'), Cell('20222201000', '20221100200'), Cell('200221110', '211100000'),
 Cell('122212202', '212222010'), Cell('121012020', '200222202'), Cell('212002120',
 '220212202'), Cell('200222112', '210121000'), Cell('212202221', '220122112'), Cell('200012202',
 '202222001'), Cell('200022022', '210022200'), Cell('022222202', '022222012'), Cell('212202001',
 '220001200'), Cell('200011000', '201100102'), Cell('212120210', '220011102'), Cell('222010020',
 '212102122'), Cell('201200220', '122020100'), Cell('202002222', '200012021'), Cell('201100021',
 '202022202'), Cell('120212000', '211201112'), Cell('202210202', '212122102'), Cell('120220222',
 '210212201'), Cell('220000112', '121002001'), Cell('122122000', '200011010'), Cell('120222201',
 '201102010'), Cell('200100021', '211010222'), Cell('200101010', '201220001'), Cell('200112001',
 '201202122'), Cell('220202012', '220021002'), Cell('021210212', '100121221'), Cell('210110002',
 '202221121'), Cell('200222020', '210102222'), Cell('220111200', '121020200'), Cell('200011220',

'122220102'), Cell('102122022', '020222011'), Cell('202001102', '210202001'), Cell('20211200221',
'21000100102'), Cell('212220211', '220122222'), Cell('202110122', '212202020'),
Cell('200110102', '201020002'), Cell('220202021', '202011122'), Cell('220110222',
'220002112'), Cell('121212000', '200222221'), Cell('201011001', '200100002'), Cell('202111000',
'201020222'), Cell('200010021', '121022012'), Cell('021102210', '102201202'), Cell('200001101',
'210202010'), Cell('200202212', '201001020'), Cell('202021121', '201012002'), Cell('202121211',
'202020102'), Cell('201010020', '202120010'), Cell('201220000', '200000111'), Cell('200101111',
'211002000'), Cell('200210210', '212021002'), Cell('202200202', '210112100'), Cell('212020011',
'122102122'), Cell('210011022', '122202021'), Cell('202122000', '202001111'), Cell('201222212',
'220011021'), Cell('211012202', '122021112'), Cell('221002220', '222210211'), Cell('201201200',
'212220221'), Cell('202202220', '202020111')]