	#	Type	P_0	P_1	P_2	P_3	P_4	P_5	P_6	P_7	P_8	P_9	P_{10}	P_{11}	P_{12}	P_{13}	P_{14}	P_{15}	P_{16}	P_{17}	P_{18}	P_{19}	P_{20}	P_{21}	P_{22}	P_{23}
0123 1230 3012 2301	#5	Quasigroup / Right Identity	x; $0{+}p_0$	$p_0{+}0$							$p_0{+}1$	$1{+}p_0$								$3{+}p_0$	$p_0{+}2$	$2{+}p_0$	$p_0{+}3$			
0132 3210 2301 1023	#7	Quasigroup / Right Identity	x; $0{+}p_0$	$p_0{+}0$									$1{+}p_0$	$p_0{+}1$	$p_0{+}2$	$3{+}p_0$									$p_0{+}3$	$2{+}p_0$
0213 2031 3012 1320	#9	Quasigroup / Right Identity	x; $0{+}p_0$			$p_0{+}0$			$p_0{+}1$				$3{+}p_0$			$1{+}p_0$				$p_0{+}2$			$p_0{+}3$			$2{+}p_0$
0312 2301 1230 3021	#11	Quasigroup / Right Identity	x; $0{+}p_0$		$p_0{+}0$							$2{+}p_0$		$p_0{+}1$		$p_0{+}2$			$1{+}p_0$		$3{+}p_0$		$p_0{+}3$			
0213 2301 3012 1032	#12	Quasigroup / Right Identity	x; $0{+}p_0$			$p_0{+}0$						$3{+}p_0$	$p_0{+}1$		$p_0{+}2$				$1{+}p_0$		$2{+}p_0$				$p_0{+}3$	
0213 1032 3201 2310	#14	Quasigroup / Right Identity	x; $0{+}p_0$		$p_0{+}0$					$2{+}p_0$				$p_0{+}1$				$p_0{+}2$		$1{+}p_0$		$p_0{+}3$			$3{+}p_0$	
0123 3201 1032 2310	#15	Quasigroup / Right Identity	x; $0{+}p_0$			$p_0{+}0$				$3{+}p_0$				$p_0{+}1$			$p_0{+}2$			$1{+}p_0$	$p_0{+}3$				$2{+}p_0$	
0132 3012 1230 2301	#16	Quasigroup / Right Identity	x; $0{+}p_0$				$p_0{+}0$		$p_0{+}1$			$2{+}p_0$						$p_0{+}2$	$3{+}p_0$		$1{+}p_0$				$p_0{+}3$	
0231 3201 1032 2310	#18	Quasigroup / Right Identity	x; $0{+}p_0$				$p_0{+}0$			$2{+}p_0$	$p_0{+}1$					$p_0{+}2$				$3{+}p_0$					$p_0{+}3$	$1{+}p_0$
0213 2310 1023 3102	#19	Quasigroup / Right Identity	x; $0{+}p_0$					$p_0{+}0$		$3{+}p_0$		$p_0{+}1$			$p_0{+}2$					$2{+}p_0$			$p_0{+}3$			$1{+}p_0$
0312 1300 2031 3210	#21	Quasigroup / Right Identity	x; $0{+}p_0$		$p_0{+}0$						$p_0{+}1$	$2{+}p_0$				$3{+}p_0$	$p_0{+}2$						$p_0{+}3$			$1{+}p_0$
0231 3210 2031 1032	#22	Quasigroup / Right Identity	x; $0{+}p_0$					$p_0{+}0$			$p_0{+}1$	$3{+}p_0$				$2{+}p_0$			$p_0{+}2$			$p_0{+}3$				$1{+}p_0$
0132 1203 2310 3021	#28	Quasigroup / Left Identity	x; $p_0{+}0$	$0{+}p_0$							$1{+}p_0$	$p_0{+}1$								$p_0{+}3$	$2{+}p_0$	$p_0{+}2$	$3{+}p_0$			
0132 1203 3021 2310	#29	Quasigroup / Commutative	x	$0{+}p_0$; $p_0{+}0$							$1{+}p_0$; $p_0{+}1$									$3{+}p_0$; $p_0{+}3$			$2{+}p_0$; $p_0{+}2$			
0132 1320 2013 3201	#30	Quasigroup / Left Identity	x; $p_0{+}0$	$0{+}p_0$									$p_0{+}1$	$1{+}p_0$	$2{+}p_0$	$p_0{+}3$									$3{+}p_0$	$p_0{+}2$
0132 1320 3201 2013	#31	Quasigroup / Commutative	x	$0{+}p_0$; $p_0{+}0$										$1{+}p_0$; $p_0{+}1$	$3{+}p_0$; $p_0{+}3$										$2{+}p_0$; $p_0{+}2$	
0132 2013 1320 3201	#32	Quasigroup	x	$0{+}p_0$	$p_0{+}0$					$p_0{+}1$				$2{+}p_0$	$1{+}p_0$				$p_0{+}3$					$p_0{+}2$	$3{+}p_0$	
0132 2013 3201 1320	#33	Quasigroup	x	$0{+}p_0$		$p_0{+}0$			$p_0{+}1$					$3{+}p_0$	$1{+}p_0$						$p_0{+}3$			$p_0{+}2$	$2{+}p_0$	
0132 2301 1023 3210	#34	Quasigroup	x	$0{+}p_0$	$p_0{+}0$					$2{+}p_0$			$p_0{+}1$					$p_0{+}3$	$1{+}p_0$			$p_0{+}2$				$3{+}p_0$
0132 2301 3210 1023	#35	Quasigroup	x	$0{+}p_0$		$p_0{+}0$			$3{+}p_0$				$p_0{+}1$			$p_0{+}3$		$1{+}p_0$		$p_0{+}2$					$2{+}p_0$
0132 2310 1203 3021	#37	Quasigroup	x	$0{+}p_0$	$p_0{+}0$						$2{+}p_0$			$p_0{+}1$		$p_0{+}3$				$1{+}p_0$		$3{+}p_0$	$p_0{+}2$			
0132 2310 3021 1203	#38	Quasigroup	x	$0{+}p_0$		$p_0{+}0$					$3{+}p_0$			$p_0{+}1$		$p_0{+}3$				$1{+}p_0$		$2{+}p_0$		$p_0{+}2$		
0132 3021 1203 2310	#40	Quasigroup	x	$0{+}p_0$			$p_0{+}0$		$p_0{+}1$		$2{+}p_0$								$p_0{+}3$	$3{+}p_0$		$1{+}p_0$			$p_0{+}2$	
0132 3021 2310 1203	#41	Quasigroup	x	$0{+}p_0$				$p_0{+}0$		$p_0{+}1$	$3{+}p_0$							$p_0{+}3$			$2{+}p_0$	$1{+}p_0$			$p_0{+}2$	
0132 1320 3201 2013	#43	Quasigroup	x	$0{+}p_0$		$p_0{+}0$						$p_0{+}1$		$2{+}p_0$	$3{+}p_0$				$p_0{+}3$				$p_0{+}2$		$1{+}p_0$	
0132 2013 3120 3210	#44	Quasigroup	x	$0{+}p_0$				$p_0{+}0$			$p_0{+}1$			$3{+}p_0$	$2{+}p_0$				$p_0{+}3$			$p_0{+}2$			$1{+}p_0$	
0132 3210 1023 2301	#46	Quasigroup	x	$0{+}p_0$			$p_0{+}0$		$2{+}p_0$		$p_0{+}1$						$p_0{+}3$			$3{+}p_0$				$p_0{+}2$		$1{+}p_0$
0132 3210 2301 1023	#47	Quasigroup	x	$0{+}p_0$				$p_0{+}0$	$3{+}p_0$			$p_0{+}1$			$p_0{+}3$				$2{+}p_0$				$p_0{+}2$		$1{+}p_0$
0231 1032 3120 2301	#49	Quasigroup	x	$p_0{+}0$	$0{+}p_0$					$1{+}p_0$				$p_0{+}2$	$p_0{+}1$				$3{+}p_0$					$2{+}p_0$	$p_0{+}3$	
0231 1302 2130 3021	#51	Quasigroup / Left Identity	x; $p_0{+}0$		$0{+}p_0$						$p_0{+}2$			$1{+}p_0$				$2{+}p_0$		$p_0{+}1$	$3{+}p_0$				$p_0{+}3$	
0231 1302 3021 2130	#52	Quasigroup	x	$p_0{+}0$	$0{+}p_0$					$p_0{+}2$				$1{+}p_0$				$3{+}p_0$	$p_0{+}1$		$2{+}p_0$				$p_0{+}3$
0231 1320 2031 3102	#54	Quasigroup / Left Identity	x; $p_0{+}0$		$0{+}p_0$							$p_0{+}2$		$1{+}p_0$	$2{+}p_0$				$p_0{+}1$		$p_0{+}3$	$3{+}p_0$				
0231 1320 3102 2031	#55	Quasigroup	x	$p_0{+}0$	$0{+}p_0$						$p_0{+}2$			$1{+}p_0$		$3{+}p_0$				$p_0{+}1$		$p_0{+}3$	$2{+}p_0$			
0213 2031 1320 3102	#57	Quasigroup / Commutative	x	$0{+}p_0$; $p_0{+}0$										$2{+}p_0$; $p_0{+}2$	$1{+}p_0$; $p_0{+}1$								$3{+}p_0$; $p_0{+}3$			
0231 2031 3102 1320	#58	Quasigroup	x		$0{+}p_0$	$p_0{+}0$								$p_0{+}2$	$3{+}p_0$	$p_0{+}1$	$1{+}p_0$							$2{+}p_0$	$p_0{+}3$	
0213 2130 1302 3021	#60	Quasigroup / Commutative	x		$0{+}p_0$; $p_0{+}0$									$2{+}p_0$; $p_0{+}2$					$1{+}p_0$; $p_0{+}1$			$3{+}p_0$; $p_0{+}3$			
0213 3021 2130 1302	#61	Quasigroup	x		$0{+}p_0$	$p_0{+}0$								$3{+}p_0$	$p_0{+}2$			$p_0{+}1$	$1{+}p_0$			$p_0{+}3$	$2{+}p_0$		
0213 2301 3120 1032	#63	Quasigroup	x		$0{+}p_0$	$p_0{+}0$				$p_0{+}2$	$3{+}p_0$									$1{+}p_0$	$p_0{+}1$			$p_0{+}3$	$2{+}p_0$
0213 3021 1302 2130	#64	Quasigroup	x		$0{+}p_0$			$p_0{+}0$				$p_0{+}2$		$2{+}p_0$		$p_0{+}1$		$3{+}p_0$				$1{+}p_0$			$p_0{+}3$
0213 3021 2130 1032	#65	Quasigroup	x		$0{+}p_0$				$p_0{+}0$				$p_0{+}2$	$3{+}p_0$		$p_0{+}1$			$2{+}p_0$			$1{+}p_0$	$p_0{+}3$		
0213 3102 1320 2031	#66	Quasigroup	x		$0{+}p_0$		$p_0{+}0$			$p_0{+}2$					$2{+}p_0$		$3{+}p_0$		$p_0{+}1$			$1{+}p_0$			$p_0{+}3$
0213 3102 2031 1320	#67	Quasigroup	x		$0{+}p_0$				$p_0{+}0$		$p_0{+}2$				$3{+}p_0$		$2{+}p_0$		$p_0{+}1$			$1{+}p_0$			$p_0{+}3$
0213 3120 1032 2301	#68	Quasigroup	x		$0{+}p_0$			$p_0{+}0$		$2{+}p_0$		$p_0{+}2$				$p_0{+}1$			$3{+}p_0$			$p_0{+}3$	$1{+}p_0$		
0213 3120 2301 1032	#71	Quasigroup	x		$0{+}p_0$				$p_0{+}0$		$3{+}p_0$	$p_0{+}2$						$p_0{+}1$	$2{+}p_0$		$p_0{+}3$			$1{+}p_0$	
0231 2310 3102 1023	#72	Quasigroup / Left Identity	x; $p_0{+}0$			$0{+}p_0$			$1{+}p_0$				$p_0{+}3$			$p_0{+}1$					$2{+}p_0$		$3{+}p_0$			$p_0{+}2$
0231 1023 3102 2310	#73	Quasigroup	x	$p_0{+}0$		$0{+}p_0$			$1{+}p_0$				$p_0{+}3$	$p_0{+}1$							$3{+}p_0$		$2{+}p_0$			$p_0{+}2$
0231 1302 2013 3120	#74	Quasigroup / Left Identity	x; $p_0{+}0$			$0{+}p_0$							$p_0{+}3$	$1{+}p_0$		$2{+}p_0$				$p_0{+}1$		$p_0{+}2$			$3{+}p_0$
0231 1320 3102 2031	#75	Quasigroup	x	$p_0{+}0$		$0{+}p_0$					$p_0{+}3$			$1{+}p_0$		$3{+}p_0$				$p_0{+}1$		$p_0{+}2$	$2{+}p_0$		
0231 1320 2103 3012	#77	Quasigroup / Left Identity	x; $p_0{+}0$			$0{+}p_0$					$p_0{+}3$			$1{+}p_0$				$2{+}p_0$		$p_0{+}1$	$3{+}p_0$				$p_0{+}2$
0231 1320 3012 2103	#78	Quasigroup	x	$p_0{+}0$		$0{+}p_0$			$p_0{+}3$					$1{+}p_0$		$3{+}p_0$		$p_0{+}1$			$2{+}p_0$				$p_0{+}2$
0231 2013 1302 3120	#80	Quasigroup	x		$p_0{+}0$	$0{+}p_0$						$2{+}p_0$		$p_0{+}3$	$1{+}p_0$	$p_0{+}1$								$p_0{+}2$	$3{+}p_0$
0231 2013 3120 1302	#83	Quasigroup / Commutative	x			$0{+}p_0$; $p_0{+}0$							$3{+}p_0$; $p_0{+}3$		$1{+}p_0$; $p_0{+}1$										$2{+}p_0$; $p_0{+}2$	
0231 2103 1320 3012	#84	Quasigroup	x		$p_0{+}0$	$0{+}p_0$							$p_0{+}3$	$2{+}p_0$			$1{+}p_0$	$p_0{+}1$			$3{+}p_0$	$p_0{+}2$			
0231 2103 3012 1320	#85	Quasigroup / Commutative	x			$0{+}p_0$; $p_0{+}0$							$3{+}p_0$; $p_0{+}3$				$1{+}p_0$; $p_0{+}1$				$2{+}p_0$; $p_0{+}2$				
0231 2310 1023 3102	#86	Quasigroup	x		$p_0{+}0$	$0{+}p_0$			$2{+}p_0$	$p_0{+}3$									$p_0{+}1$	$1{+}p_0$				$3{+}p_0$	$p_0{+}2$
0231 2310 3102 1023	#87	Quasigroup / Commutative	x			$0{+}p_0$; $p_0{+}0$			$3{+}p_0$; $p_0{+}3$											$1{+}p_0$; $p_0{+}1$			$2{+}p_0$; $p_0{+}2$		
0231 3012 1320 2103	#88	Quasigroup	x			$0{+}p_0$	$p_0{+}0$				$p_0{+}3$			$2{+}p_0$		$p_0{+}1$	$3{+}p_0$				$1{+}p_0$			$p_0{+}2$	
0231 3012 2103 1320	#89	Quasigroup	x			$0{+}p_0$		$p_0{+}0$					$p_0{+}3$	$3{+}p_0$	$p_0{+}1$		$2{+}p_0$				$1{+}p_0$		$p_0{+}2$		
0231 3102 1023 2310	#90	Quasigroup	x			$0{+}p_0$	$p_0{+}0$		$2{+}p_0$			$p_0{+}3$					$p_0{+}1$			$3{+}p_0$		$p_0{+}2$	$1{+}p_0$		
0231 3102 2310 1023	#93	Quasigroup	x			$0{+}p_0$		$p_0{+}0$	$3{+}p_0$		$p_0{+}3$						$p_0{+}1$		$2{+}p_0$	$p_0{+}2$	$1{+}p_0$			
0231 3120 1302 2103	#94	Quasigroup	x			$0{+}p_0$	$p_0{+}0$		$p_0{+}3$				$2{+}p_0$		$3{+}p_0$		$p_0{+}1$						$1{+}p_0$	$p_0{+}2$	
0231 3120 2103 1302	#95	Quasigroup	x			$0{+}p_0$		$p_0{+}0$	$p_0{+}3$		$3{+}p_0$			$p_0{+}1$		$2{+}p_0$							$1{+}p_0$	$p_0{+}2$	
0312 1023 2130 3201	#96	Quasigroup / Left Identity	x; $p_0{+}0$				$0{+}p_0$		$1{+}p_0$			$p_0{+}2$							$2{+}p_0$	$p_0{+}3$		$p_0{+}1$			$3{+}p_0$
0312 1023 3201 2130	#97	Quasigroup	x	$p_0{+}0$			$0{+}p_0$		$1{+}p_0$		$p_0{+}2$								$3{+}p_0$		$p_0{+}3$	$p_0{+}1$			$2{+}p_0$
0312 1203 2013 3120	#98	Quasigroup / Left Identity	x; $p_0{+}0$				$0{+}p_0$			$p_0{+}2$	$1{+}p_0$					$2{+}p_0$				$p_0{+}3$			$3{+}p_0$	$p_0{+}1$	
0312 1203 3120 2013	#101	Quasigroup	x	$p_0{+}0$			$0{+}p_0$		$p_0{+}2$		$1{+}p_0$					$3{+}p_0$			$p_0{+}3$				$2{+}p_0$		$p_0{+}1$
0312 1230 2103 3021	#102	Quasigroup / Left Identity	x; $p_0{+}0$				$0{+}p_0$					$1{+}p_0$	$p_0{+}2$			$p_0{+}3$	$2{+}p_0$					$3{+}p_0$			$p_0{+}1$
0312 1230 3021 2103	#103	Quasigroup	x	$p_0{+}0$			$0{+}p_0$					$1{+}p_0$		$p_0{+}2$	$p_0{+}3$	$3{+}p_0$							$2{+}p_0$		$p_0{+}1$
0312 2031 1203 3120	#104	Quasigroup	x		$p_0{+}0$		$0{+}p_0$				$2{+}p_0$		$p_0{+}2$			$1{+}p_0$				$p_0{+}3$			$p_0{+}1$	$3{+}p_0$	
0312 2031 3120 1203	#105	Quasigroup	x			$p_0{+}0$	$0{+}p_0$				$3{+}p_0$		$p_0{+}2$		$p_0{+}3$	$1{+}p_0$					$2{+}p_0$			$p_0{+}1$	
0312 2103 1230 3021	#106	Quasigroup	x			$p_0{+}0$	$0{+}p_0$			$p_0{+}2$		$2{+}p_0$					$1{+}p_0$		$p_0{+}3$		$3{+}p_0$			$p_0{+}1$	
0312 2103 3021 1230	#107	Quasigroup	x			$p_0{+}0$	$0{+}p_0$			$p_0{+}2$		$3{+}p_0$					$1{+}p_0$			$p_0{+}3$		$2{+}p_0$	$p_0{+}1$		
0312 3120 1023 2130	#108	Quasigroup	x		$p_0{+}0$		$0{+}p_0$			$2{+}p_0$				$p_0{+}2$		$p_0{+}3$			$1{+}p_0$				$p_0{+}1$		$3{+}p_0$
0312 3201 1230 2103	#111	Quasigroup	x			$p_0{+}0$	$0{+}p_0$			$3{+}p_0$					$p_0{+}2$		$p_0{+}3$		$1{+}p_0$				$p_0{+}1$	$2{+}p_0$	
0312 3021 1230 2103	#113	Quasigroup / Commutative	x				$0{+}p_0$; $p_0{+}0$				$2{+}p_0$; $p_0{+}2$								$3{+}p_0$; $p_0{+}3$			$1{+}p_0$; $p_0{+}1$			
0312 1230 2103 3021	#114	Quasigroup	x				$0{+}p_0$	$p_0{+}0$			$p_0{+}2$	$3{+}p_0$					$2{+}p_0$	$p_0{+}3$			$p_0{+}1$	$1{+}p_0$			
0312 1203 2031 3120	#116	Quasigroup / Commutative	x				$0{+}p_0$; $p_0{+}0$				$2{+}p_0$; $p_0{+}2$					$3{+}p_0$; $p_0{+}3$								$1{+}p_0$; $p_0{+}1$	
0312 3120 2031 1203	#117	Quasigroup	x				$0{+}p_0$	$p_0{+}0$			$3{+}p_0$	$p_0{+}2$			$p_0{+}3$	$2{+}p_0$							$p_0{+}1$	$1{+}p_0$	
0312 3201 1023 2130	#118	Quasigroup / Commutative	x				$0{+}p_0$; $p_0{+}0$		$2{+}p_0$; $p_0{+}2$											$3{+}p_0$; $p_0{+}3$					$1{+}p_0$; $p_0{+}1$
0312 3201 2130 1023	#119	Quasigroup	x				$0{+}p_0$	$p_0{+}0$	$3{+}p_0$	$p_0{+}2$							$p_0{+}3$	$2{+}p_0$						$1{+}p_0$	$p_0{+}1$
0213 3201 1023 2130	#121	Quasigroup	x; $0{+}p_0$	$p_0{+}0$					$0{+}p_0$	$1{+}p_0$	$p_0{+}3$						$3{+}p_0$					$p_0{+}2$		$p_0{+}1$	$2{+}p_0$
0213 1203 2130 3012	#122	Quasigroup / Left Identity	x; $p_0{+}0$						$0{+}p_0$		$1{+}p_0$	$p_0{+}3$				$p_0{+}2$				$2{+}p_0$			$3{+}p_0$		$p_0{+}1$
0213 1302 3012 2130	#123	Quasigroup	x	$p_0{+}0$					$0{+}p_0$		$1{+}p_0$			$p_0{+}3$	$p_0{+}2$					$3{+}p_0$		$2{+}p_0$		$p_0{+}1$	

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Table of quasigroups with columns P_0 through P_{23}.

Perm	#	Type	P_0	P_1	P_2	P_3	P_4	P_5	P_6	P_7	P_8	P_9	P_{10}	P_{11}	P_{12}	P_{13}	P_{14}	P_{15}	P_{16}	P_{17}	P_{18}	P_{19}	P_{20}	P_{21}	P_{22}	P_{23}
0321 1230 2013 3102	*124	Quasigroup Left Identity	x / p_0+0					$0+p_0$		p_0+3		$1+p_0$			$2+p_0$					p_0+2			$3+p_0$		p_0+1	
0321 1230 3102 2013	*127	Quasigroup	x	p_0+0				$0+p_0$	p_0+3			$1+p_0$			$3+p_0$				p_0+2				$2+p_0$			p_0+1
0321 1230 2013 3102	*128	Quasigroup	x		p_0+0			$0+p_0$				$2+p_0$	p_0+3		$1+p_0$				p_0+2				p_0+1	$3+p_0$		
0321 2013 3102 1230	*129	Quasigroup	x			p_0+0		$0+p_0$				$3+p_0$		p_0+3	$1+p_0$		p_0+2					p_0+1	$2+p_0$			
0321 2103 1032 3210	*130	Quasigroup	x		p_0+0			$0+p_0$		$2+p_0$			p_0+3			p_0+2	$1+p_0$						p_0+1			$3+p_0$
0321 3210 2103 1032	*133	Quasigroup	x			p_0+0		$0+p_0$		$3+p_0$			p_0+3		p_0+2		$1+p_0$							p_0+1		$2+p_0$
0321 2130 1203 3012	*134	Quasigroup	x		p_0+0			$0+p_0$		p_0+3	$2+p_0$							$1+p_0$	p_0+2		$3+p_0$			p_0+1		
0321 2130 3012 1203	*135	Quasigroup	x			p_0+0		$0+p_0$	p_0+3		$3+p_0$							$1+p_0$		p_0+2	$2+p_0$		p_0+1			
0321 3012 1203 2130	*136	Quasigroup	x				p_0+0	$0+p_0$			$2+p_0$	p_0+3					p_0+2	$3+p_0$				$1+p_0$	p_0+1			
0321 3012 2130 1203	*139	Quasigroup Commutative	x					$0+p_0$ / p_0+0			$3+p_0$ / p_0+3								$2+p_0$ / p_0+2		$1+p_0$ / p_0+1					
0321 3102 1230 2013	*140	Quasigroup	x				p_0+0	$0+p_0$				p_0+3	$2+p_0$		$3+p_0$	p_0+2							$1+p_0$	p_0+1		
0321 3102 2013 1230	*141	Quasigroup Commutative	x					$0+p_0$ / p_0+0				$3+p_0$ / p_0+3			$2+p_0$ / p_0+2						$1+p_0$ / p_0+1					
0321 1032 3210 2103	*142	Quasigroup	x				p_0+0	$0+p_0$		p_0+3	$2+p_0$						$3+p_0$	p_0+2						p_0+1	$1+p_0$	
1023 0231 2310 3102	*148	Quasigroup Commutative	x			$1+p_0$ / p_0+1			$0+p_0$ / p_0+0											$2+p_0$ / p_0+2			$3+p_0$ / p_0+3			
1023 0231 3201 2310	*149	Quasigroup	x		p_0+1	$1+p_0$			$0+p_0$	p_0+0										p_0+2	$3+p_0$			$2+p_0$	p_0+3	
1023 0312 2130 3201	*150	Quasigroup Commutative	x				$1+p_0$ / p_0+1		$0+p_0$ / p_0+0										$2+p_0$ / p_0+2						$3+p_0$ / p_0+3	
1023 0312 3201 2130	*151	Quasigroup	x				$1+p_0$	p_0+1	$0+p_0$	p_0+0					p_0+2	$3+p_0$									$2+p_0$	p_0+3
1023 2130 0312 3201	*152	Quasigroup	x	p_0+1			$2+p_0$		$0+p_0$		p_0+0							$1+p_0$		p_0+2		p_0+3			$3+p_0$	
1023 2130 3201 0312	*153	Quasigroup Left Identity	x / p_0+1			$3+p_0$		$0+p_0$				p_0+0						$1+p_0$	p_0+2		p_0+3				$2+p_0$	
1023 2301 0132 3210	*154	Quasigroup	x	$2+p_0$			p_0+1		$0+p_0$		p_0+0					p_0+2			$1+p_0$				p_0+3		$3+p_0$
1023 2301 3210 0132	*155	Quasigroup	x	$3+p_0$				p_0+1	$0+p_0$			p_0+0			p_0+2			$1+p_0$				p_0+3			$2+p_0$
1023 0231 2310 3102	*157	Quasigroup	x		$2+p_0$			p_0+1	$0+p_0$		p_0+0						p_0+2		$1+p_0$	p_0+3		$3+p_0$			
1023 2310 3102 0231	*158	Quasigroup	x		$3+p_0$	p_0+1		$0+p_0$			p_0+0				p_0+2			$1+p_0$		p_0+3	$2+p_0$				
1023 3102 0231 2310	*160	Quasigroup Left Identity	x / p_0+1		$2+p_0$			$0+p_0$				p_0+0		p_0+2				$3+p_0$				$1+p_0$			p_0+3
1023 3102 2310 0231	*161	Quasigroup	x	p_0+1	$3+p_0$			$0+p_0$					p_0+0	p_0+2				$2+p_0$				$1+p_0$		p_0+3	
1023 3201 0312 2130	*163	Quasigroup	x	p_0+1	$2+p_0$			$0+p_0$				p_0+0		p_0+2			$3+p_0$						p_0+3	$1+p_0$	
1023 3201 2130 0312	*164	Quasigroup	x		p_0+1	$3+p_0$		$0+p_0$				p_0+0		p_0+2			$2+p_0$					p_0+3		$1+p_0$	
1032 3210 0132 2301	*166	Quasigroup	x	$2+p_0$	p_0+1			$0+p_0$			p_0+0					p_0+2	$3+p_0$				p_0+3				$1+p_0$
1032 3210 2301 0132	*167	Quasigroup	x	$3+p_0$		p_0+1		$0+p_0$			p_0+0				p_0+2		$2+p_0$			p_0+3					$1+p_0$
0213 2301 1032 3120	*172	Quasigroup	x		$1+p_0$	p_0+1			p_0+0	$0+p_0$									$2+p_0$	p_0+3			p_0+2	$3+p_0$		
0312 2103 1230 3021	*174	Quasigroup	x			p_0+1	$1+p_0$	p_0+0	$0+p_0$						$2+p_0$	p_0+3									p_0+2	$3+p_0$
0312 2103 3021 1230	*176	Quasigroup	x	p_0+1			$2+p_0$		$0+p_0$	p_0+0					$1+p_0$					p_0+3		p_0+2			$3+p_0$
0231 2301 1032 3120	*179	Quasigroup	x	$2+p_0$			p_0+1		$0+p_0$	p_0+0							p_0+3	$1+p_0$		p_0+2		$3+p_0$			
0231 3120 2301 1032	*180	Quasigroup	x	$3+p_0$		p_0+1		$0+p_0$		p_0+0						p_0+3	$1+p_0$			p_0+2		$2+p_0$			
0231 3120 1032 2301	*182	Quasigroup Right Identity	x / $2+p_0$		p_0+1		$0+p_0$	p_0+0							p_0+3			$1+p_0$				p_0+2		$3+p_0$	
0231 3201 2310 0123	*183	Quasigroup Right Identity	x / $3+p_0$				p_0+1		$0+p_0$		p_0+0			p_0+3				$1+p_0$			p_0+2		$2+p_0$		
1032 2301 3201 0123	*185	Quasigroup	x	p_0+1	$3+p_0$			$0+p_0$					p_0+0	p_0+3			$2+p_0$					$1+p_0$	p_0+2		
1032 3201 0123 2310	*186	Quasigroup Right Identity	x / $2+p_0$		p_0+1			$0+p_0$			p_0+0				p_0+3		$3+p_0$			p_0+2			$1+p_0$		
1032 3201 2310 0123	*187	Quasigroup Right Identity	x / $3+p_0$			p_0+1		$0+p_0$			p_0+0			p_0+3		p_0+3		$2+p_0$	p_0+2			$1+p_0$			
3021 2310 0123 1032	*189	Quasigroup	x		p_0+1		$2+p_0$		$0+p_0$		p_0+0			p_0+3		$3+p_0$							p_0+2		$1+p_0$
3021 2103 0231 1032	*190	Quasigroup	x		p_0+1		$3+p_0$		$0+p_0$		p_0+0			p_0+3	$2+p_0$								p_0+2		$1+p_0$
0132 2310 3021 1203	*192	Quasigroup	x	$1+p_0$			p_0+2		p_0+0		$0+p_0$						p_0+1		$2+p_0$		$3+p_0$			p_0+3	
0132 3021 2103 1203	*193	Quasigroup	x	$1+p_0$				p_0+2		p_0+0	$0+p_0$						p_0+1		$3+p_0$		$2+p_0$				p_0+3
0132 2031 3102 1203	*194	Quasigroup	x	p_0+2			$1+p_0$		p_0+0	$0+p_0$					$2+p_0$			p_0+1					$3+p_0$		p_0+3
0312 2031 3120 1203	*197	Quasigroup Left Identity	x / p_0+2				$1+p_0$			p_0+0	$0+p_0$				$3+p_0$				p_0+1			$2+p_0$		p_0+3	
0321 2130 3012 1203	*198	Quasigroup	x		p_0+2			$1+p_0$	p_0+0		$0+p_0$							$2+p_0$		p_0+1	$3+p_0$		p_0+3		
0321 3012 2130 1203	*199	Quasigroup	x		p_0+2			$1+p_0$		p_0+0	$0+p_0$							$3+p_0$	p_0+1		$2+p_0$		p_0+3		
1203 2031 0312 3120	*200	Quasigroup Commutative	x				$2+p_0$ / p_0+2			$0+p_0$ / p_0+0				$1+p_0$ / p_0+0									$3+p_0$ / p_0+3		
1203 2031 3120 0312	*201	Quasigroup	x			$3+p_0$	p_0+2			$0+p_0$	p_0+0			p_0+1	$1+p_0$								p_0+3	$2+p_0$	
1203 0321 3012	*203	Quasigroup Commutative	x				$2+p_0$ / p_0+2			$0+p_0$ / p_0+0					$1+p_0$ / p_0+1					$3+p_0$ / p_0+3					
1203 2310 3012 0321	*204	Quasigroup	x				p_0+2	$3+p_0$		$0+p_0$	p_0+0						p_0+1	$1+p_0$			$2+p_0$	p_0+3			
1203 2310 0132 3021	*206	Quasigroup Commutative	x	$2+p_0$ / p_0+2						$0+p_0$ / p_0+0									$1+p_0$ / p_0+1		$3+p_0$ / p_0+3				
1203 2310 3021 0132	*207	Quasigroup Left Identity	x / p_0+2	$3+p_0$						$0+p_0$	p_0+0								p_0+1	$1+p_0$	p_0+3	$2+p_0$			
1203 3012 0231 2130	*208	Quasigroup Left Identity	x / p_0+2				$2+p_0$			$0+p_0$		p_0+0		p_0+1		$3+p_0$			$1+p_0$						p_0+3
1203 3012 2130 0321	*209	Quasigroup	x	p_0+2			$3+p_0$			$0+p_0$		p_0+0	p_0+1			$2+p_0$			$1+p_0$				p_0+3		
1203 0132 3021 2310	*210	Quasigroup	x	$2+p_0$		p_0+2			$0+p_0$		p_0+0	p_0+1								$3+p_0$		$1+p_0$	p_0+3		
1203 2310 0132	*213	Quasigroup	x	$3+p_0$	p_0+2				$0+p_0$		p_0+0		p_0+1						$2+p_0$	$1+p_0$	p_0+3				
1203 3120 0312	*214	Quasigroup	x		p_0+2		$2+p_0$			$0+p_0$		p_0+0			$3+p_0$		p_0+1				p_0+3		$1+p_0$		
2031 1203 3120 0312	*215	Quasigroup	x		p_0+2	$3+p_0$			$0+p_0$			p_0+0		$2+p_0$	p_0+1					p_0+3		$1+p_0$			
0123 2301	*216	Quasigroup Right Identity	x / $1+p_0$				p_0+3		p_0+0		$0+p_0$						p_0+1	$2+p_0$		$3+p_0$			p_0+2		
2103 3021 0312	*218	Quasigroup	x		p_0+3	$1+p_0$		p_0+0		$0+p_0$					$2+p_0$			p_0+1		$3+p_0$		p_0+2			
0312 3021 2130	*219	Quasigroup	x		p_0+3		$1+p_0$			p_0+0	$0+p_0$			$3+p_0$			p_0+1				$2+p_0$				
0321 2013 3102	*220	Quasigroup	x	p_0+3				$1+p_0$	p_0+0		$0+p_0$			$2+p_0$			p_0+1					$3+p_0$			p_0+2
0321 3102 2013	*223	Quasigroup Left Identity	x / p_0+3					$1+p_0$		p_0+0	$0+p_0$			$3+p_0$					p_0+1		$2+p_0$		p_0+2		
0321 3012 1230 3102	*224	Quasigroup	x			p_0+3	$2+p_0$			p_0+0	$0+p_0$			$1+p_0$	p_0+1							$3+p_0$	p_0+2		
1230 2013 3102 0321	*225	Quasigroup Commutative	x					$3+p_0$ / p_0+3			$0+p_0$ / p_0+0			$1+p_0$ / p_0+1									$2+p_0$ / p_0+2		
1230 2103 0312 3021	*226	Quasigroup	x			$2+p_0$	p_0+3			p_0+0	$0+p_0$				$1+p_0$	p_0+1				p_0+2	$3+p_0$				
1230 2103 3021 0312	*229	Quasigroup Commutative	x				$3+p_0$ / p_0+3			$0+p_0$ / p_0+0				$1+p_0$ / p_0+1						$2+p_0$ / p_0+2					
1230 2301 0123	*230	Quasigroup Right Identity	x / $2+p_0$	p_0+3				p_0+0	$0+p_0$								$1+p_0$	p_0+1	$3+p_0$	p_0+2					
3012 0123	*232	Quasigroup Right Identity	x / $2+p_0$			p_0+3			$0+p_0$	p_0+0			p_0+1			$3+p_0$			$1+p_0$				p_0+2		
2301 0123	*235	Quasigroup Right Identity	x / $3+p_0$		p_0+3				$0+p_0$	p_0+0		p_0+1			p_0+1			$2+p_0$		$1+p_0$		p_0+2			
3021 0312	*236	Quasigroup Left Identity	x / p_0+3				$2+p_0$			$0+p_0$	p_0+0		p_0+1	$3+p_0$		p_0+1				$1+p_0$					p_0+2
3102 2013	*237	Quasigroup	x	p_0+3			$3+p_0$			$0+p_0$		p_0+0	p_0+1	$2+p_0$						$1+p_0$			p_0+2		
3102 2013	*238	Quasigroup	x		p_0+3			$2+p_0$			$0+p_0$	p_0+0		$3+p_0$			p_0+1				p_0+2	$1+p_0$			
3012	*239	Quasigroup	x		p_0+3		$3+p_0$			$0+p_0$		p_0+0	$2+p_0$		p_0+1					p_0+2	$1+p_0$				
2031 0123	*240	Quasigroup Right Identity	x / $1+p_0$		p_0+2			p_0+0		$0+p_0$			$2+p_0$							p_0+3		p_0+1			$3+p_0$
0213 2130	*243	Quasigroup	x	p_0+2	$1+p_0$			p_0+0		$0+p_0$						$2+p_0$	p_0+3		$3+p_0$				p_0+1	
0213 3021	*244	Quasigroup Left Identity	x / p_0+2		$1+p_0$				p_0+0	$0+p_0$			$2+p_0$		$3+p_0$		p_0+3	$2+p_0$					p_0+1	
2013 0231	*246	Quasigroup	x		$1+p_0$	p_0+2	p_0+0		$0+p_0$			$2+p_0$		p_0+3							$3+p_0$	p_0+1		
0231 3120	*247	Quasigroup	x		$1+p_0$		p_0+2		p_0+0	$0+p_0$		$3+p_0$		p_0+3					$2+p_0$		p_0+1			
2013 0231	*248	Quasigroup	x	p_0+2	$2+p_0$			p_0+0	$0+p_0$		$1+p_0$						p_0+3	p_0+1	$3+p_0$					
3120	*249	Quasigroup Left Identity	x / p_0+2		$3+p_0$				$2+p_0$	$0+p_0$		$1+p_0$			p_0+3	p_0+1		$2+p_0$						
2031 0123	*250	Quasigroup Right Identity	x / $2+p_0$				p_0+2		$0+p_0$		$0+p_0$			$1+p_0$	p_0+3		p_0+1					$3+p_0$

Table: Quasigroup classification (page 3). Columns P0–P23.

Perm	#	Property	P0	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23
1302 2031 3210 0123	#253	Quasigroup Right Identity	x / 3+p0				p0+2					p0+0	0+p0			1+p0	p0+3							p0+1		2+p0
1302 2130 0231	#254	Quasigroup	x		2+p0		p0+2					p0+0	0+p0			p0+3	1+p0					3+p0		p0+1		
1302 2130 3021 0213	#255	Quasigroup	x		3+p0			p0+2				p0+0	0+p0			p0+3	1+p0						2+p0	p0+1		
1302 3021 0213 2130	#256	Quasigroup Commutative	x		2+p0 / p0+2								0+p0 / p0+0					3+p0 / p0+3						1+p0 / p0+1		
1302 3021 2130 0213	#257	Quasigroup	x		3+p0	p0+2							0+p0	p0+0		p0+3	2+p0					p0+1	1+p0			
1302 3120 0231 2013	#259	Quasigroup Commutative	x			2+p0 / p0+2							0+p0 / p0+0			3+p0 / p0+3								1+p0 / p0+1		
1302 3120 2013 0231	#260	Quasigroup	x		p0+2	3+p0							0+p0	p0+0	2+p0	p0+3								p0+1	1+p0	
1302 2031 3210 0123	#263	Quasigroup Right Identity	x / 3+p0		p0+2								0+p0	p0+0		p0+3	2+p0							p0+1	1+p0	
0132 2013 3201	#264	Quasigroup	x	1+p0		p0+3			p0+0				0+p0		2+p0								p0+2	p0+1		3+p0
0132 3201 2013	#265	Quasigroup	x	1+p0	p0+3					p0+0			0+p0	3+p0						p0+2				p0+1		2+p0
0132 2031 3120	#266	Quasigroup	x		1+p0		p0+3		p0+0				0+p0			2+p0				p0+2			3+p0		p0+1	
0132 3102 2031	#267	Quasigroup	x		1+p0			p0+3		p0+0			0+p0		3+p0	p0+2							2+p0			p0+1
0132 2103 3012	#269	Quasigroup	x	p0+3		1+p0			p0+0				0+p0				2+p0		p0+2		3+p0					p0+1
0132 3012 2103	#270	Quasigroup Left Identity	x / p0+3			1+p0				p0+0			0+p0				3+p0			p0+2	2+p0			p0+1		
0132 2013 3102	#272	Quasigroup	x	2+p0		1+p0		p0+3			p0+0		0+p0	1+p0				3+p0						p0+1		3+p0
0132 3021 2031	#275	Quasigroup	x	3+p0			p0+3					p0+0	0+p0	1+p0			p0+2						p0+1		2+p0	
0132 2031 3102	#276	Quasigroup	x	p0+3	2+p0						p0+0		0+p0			1+p0					p0+2	p0+1	3+p0			
0132 3102 2031	#277	Quasigroup Left Identity	x / p0+3		3+p0							p0+0	0+p0			1+p0				p0+2	p0+1	2+p0			
2103 0231 3012	#278	Quasigroup	x			2+p0	p0+3					p0+0	0+p0			p0+2	1+p0				3+p0			p0+1		
2103 3012 0231	#279	Quasigroup	x			3+p0		p0+3					p0+0	0+p0	p0+2		1+p0					2+p0		p0+1		
3012 0231 2103	#280	Quasigroup	x		p0+3	2+p0						p0+0	0+p0			3+p0	p0+2				1+p0	p0+1			
3012 2103 0231	#281	Quasigroup Commutative	x		3+p0 / p0+3				p0+0				0+p0 / p0+0				2+p0 / p0+2				1+p0 / p0+1				
3102 0213 2031	#282	Quasigroup	x		2+p0	p0+3						p0+0	0+p0		p0+2	3+p0							1+p0	p0+1		
3102 2031 0213	#285	Quasigroup Commutative	x		3+p0 / p0+3								0+p0 / p0+0			2+p0 / p0+2							1+p0 / p0+1		
3201 0132 2013	#286	Quasigroup Left Identity	x / p0+3	2+p0								p0+0	0+p0	3+p0		p0+2									1+p0	p0+1
3201 2013 0132	#287	Quasigroup Commutative	x										0+p0 / p0+0		2+p0 / p0+2									1+p0 / p0+1		
0132 1320 3201	#288	Quasigroup Commutative	x	1+p0 / p0+1										2+p0 / p0+2	0+p0 / p0+0									3+p0 / p0+3		
0132 3201 1320	#289	Quasigroup Left Identity	x / p0+1	1+p0								p0+2	3+p0	0+p0	p0+0										2+p0	p0+3
0231 1302 3120	#290	Quasigroup Commutative	x		1+p0 / p0+1							2+p0 / p0+0		0+p0 / p0+0									3+p0 / p0+3		
0231 3120 1302	#293	Quasigroup	x		p0+1	1+p0							3+p0	p0+2	0+p0	p0+0							p0+3	2+p0		
0321 1230 3102	#294	Quasigroup Commutative	x				1+p0 / p0+1					2+p0 / p0+2		0+p0 / p0+0									3+p0 / p0+3		
0321 3102 1230	#295	Quasigroup	x			p0+1	1+p0				p0+2	3+p0		0+p0	p0+0								2+p0	p0+3		
1230 0321 3102	#296	Quasigroup	x		p0+1		2+p0					1+p0		p0+2	0+p0		p0+0				p0+3		3+p0		
1230 3102 0321	#297	Quasigroup	x		p0+1		3+p0					1+p0	p0+2	0+p0			p0+0					p0+3	2+p0		
1302 0231 3120	#298	Quasigroup	x			2+p0	p0+1		p0+2				1+p0	0+p0		p0+0						3+p0			p0+3
1302 3120 0231	#299	Quasigroup	x			3+p0	p0+1		p0+2				1+p0	0+p0					p0+0			2+p0	p0+3		
1320 0132 3201	#300	Quasigroup	x	2+p0			p0+1					p0+2	1+p0	0+p0		p0+0					p0+3		3+p0		
1320 3201 0132	#303	Quasigroup	x	3+p0				p0+1			p0+2		1+p0	0+p0			p0+0				p0+3		2+p0		
0132 3102 1230	#305	Quasigroup	x	p0+1			2+p0	p0+2			3+p0			0+p0							1+p0			p0+3	
3102 1230 0321	#306	Quasigroup Left Identity	x / p0+1				3+p0	p0+2			2+p0			0+p0				p0+0			1+p0		p0+3	
3120 0231 1302	#308	Quasigroup Left Identity	x / p0+1			2+p0						p0+2	3+p0		0+p0			p0+0		p0+3			1+p0	
1302 3120 0231	#309	Quasigroup	x	p0+1		3+p0						p0+2	2+p0		0+p0			p0+0			p0+3		1+p0	
0132 3201 1320	#310	Quasigroup	x	2+p0	p0+1						p0+2			3+p0	0+p0				p0+0				p0+3	1+p0	
3201 1320 0132	#311	Quasigroup	x	3+p0		p0+1			p0+2				2+p0	0+p0					p0+0			p0+3	1+p0	
0123 1302 2031	#312	Quasigroup Right Identity	x / 1+p0	p0+1									2+p0	p0+3	p0+0	0+p0							p0+2	3+p0	
0213 1320 3102	#315	Quasigroup	x		1+p0	p0+1							p0+3	2+p0	p0+0	0+p0						3+p0	p0+2		
0213 3102 1320	#316	Quasigroup Commutative	x		1+p0 / p0+1								3+p0 / p0+3	0+p0 / p0+0								2+p0 / p0+2		
0312 1203 3120	#318	Quasigroup	x				1+p0	p0+1			2+p0	p0+3				p0+0	0+p0						p0+2	3+p0	
0312 3120 1203	#319	Quasigroup Commutative	x				1+p0 / p0+1				3+p0 / p0+3				0+p0 / p0+0							2+p0 / p0+2		
1203 0312 3120	#320	Quasigroup	x			p0+1	2+p0					1+p0		p0+3	0+p0	p0+0					p0+2		3+p0	
1203 3120 0312	#321	Quasigroup	x			p0+1	3+p0					1+p0		p0+3	0+p0		p0+0				p0+2	2+p0		
1302 0123 3210	#322	Quasigroup Right Identity	x / 2+p0				p0+1					p0+3	1+p0		0+p0	p0+0					p0+2		3+p0	
1302 3210 0123	#325	Quasigroup Right Identity	x / 3+p0					p0+1			p0+3		1+p0		0+p0		p0+0				p0+2		2+p0	
1320 0213 3102	#326	Quasigroup	x		2+p0			p0+1	p0+3				1+p0		0+p0	p0+0					3+p0			p0+2
1320 3102 0213	#327	Quasigroup	x		3+p0		p0+1	p0+3				1+p0		0+p0		p0+0					2+p0		p0+2	
3102 0231 1320	#328	Quasigroup Left Identity	x / p0+1		2+p0							p0+3	3+p0		0+p0		p0+0			p0+2	1+p0		
1302 3120 0213	#329	Quasigroup	x	p0+1	3+p0						p0+3		2+p0		0+p0		p0+0			p0+2	1+p0		
3120 1203 0312	#331	Quasigroup	x	p0+1			2+p0		p0+3		3+p0			0+p0		p0+0					1+p0		p0+2
3120 1203 0312	#332	Quasigroup Left Identity	x / p0+1				3+p0		p0+3	2+p0			0+p0				p0+0			1+p0	p0+2		
3210 1302 0213	#335	Quasigroup Right Identity	x / 3+p0			p0+1			p0+3			2+p0			0+p0		p0+0			p0+2		1+p0	
0231 1320 3102	#336	Quasigroup	x		1+p0		p0+2					p0+1	2+p0	p0+0	0+p0						3+p0	p0+3		
0231 3012 1320	#337	Quasigroup	x		1+p0	p0+2						p0+1		3+p0	p0+0	0+p0					2+p0		p0+3	
0312 1230 3021	#338	Quasigroup	x	p0+2		1+p0						2+p0	p0+1	p0+0	0+p0						3+p0		p0+3	
0312 3021 1230	#339	Quasigroup Left Identity	x / p0+2			1+p0						3+p0	p0+1		0+p0	p0+0				2+p0		p0+3	
1032 0321 3210	#340	Quasigroup	x		p0+2		1+p0		2+p0				p0+1		p0+0	0+p0					p0+3	3+p0	
1032 3210 0321	#343	Quasigroup	x		p0+2		1+p0	3+p0					p0+1		0+p0	p0+0					p0+3	2+p0	
1032 3210 0321	#345	Quasigroup	x			p0+2	3+p0	p0+1	1+p0					0+p0	p0+0						p0+3	2+p0	
2103 1230 0321	#346	Quasigroup Commutative	x				2+p0 / p0+2					1+p0 / p0+1		0+p0 / p0+0							3+p0 / p0+3		
2103 1230 0321	#349	Quasigroup	x				3+p0	p0+2			p0+1	1+p0		0+p0	p0+0					p0+3	2+p0	
1320 0231 3012	#350	Quasigroup Commutative	x		2+p0 / p0+2								1+p0 / p0+1		0+p0 / p0+0					3+p0 / p0+3			
1320 3012 0231	#351	Quasigroup	x		p0+2	3+p0						p0+1	1+p0		0+p0	p0+0				2+p0	p0+3		
3012 0231 1320	#352	Quasigroup	x	p0+2		2+p0			p0+1			3+p0		0+p0		p0+0				1+p0		p0+3	
3012 1320 0231	#355	Quasigroup Left Identity	x / p0+2			3+p0				p0+1		2+p0		0+p0		p0+0		1+p0			p0+3	
0312 3021 1230	#356	Quasigroup	x		p0+2		2+p0			p0+1	3+p0		0+p0		0+p0				1+p0		p0+3	
3021 1230 0312	#357	Quasigroup	x			p0+2	3+p0		p0+1		2+p0		0+p0			p0+0			1+p0	p0+3	
3210 1032 0321	#359	Quasigroup	x	p0+2				3+p0	2+p0	p0+1			0+p0			p0+0			p0+3		1+p0
1302 0231 3120	#360	Quasigroup	x		1+p0			p0+3				p0+1	2+p0	p0+0		0+p0				3+p0	p0+2	
3021 1302 0213	#361	Quasigroup	x		1+p0		p0+3				p0+1	3+p0	p0+0		0+p0				2+p0		p0+2	
0312 1023 3120	#362	Quasigroup	x			p0+3	1+p0		2+p0			p0+1	p0+0		0+p0					p0+2	3+p0	
0312 3120 1023	#365	Quasigroup	x			p0+3	1+p0		3+p0			p0+1	p0+0		p0+0	0+p0				p0+2	2+p0	
1023 0312 3120	#366	Quasigroup	x	p0+3				1+p0			2+p0		p0+1	p0+0		0+p0				3+p0		p0+2
3120 1023 0312	#367	Quasigroup Left Identity	x / p0+3					1+p0			3+p0		p0+1		p0+0	0+p0			2+p0			p0+2

			p_0	p_1	p_2	p_3	p_4	p_5	p_6	p_7	p_8	p_9	p_{10}	p_{11}	p_{12}	p_{13}	p_{14}	p_{15}	p_{16}	p_{17}	p_{18}	p_{19}	p_{20}	p_{21}	p_{22}	p_{23}
2 1 3 0 1 0 2 3 0 3 1 2 3 2 0 1	s_{368}	Quasigroup	x				$\frac{}{2+p_0}$	$\frac{}{p_0+3}$	$\frac{}{1+p_0}$	$\frac{}{p_0+1}$							$\frac{}{p_0+0}$	$\frac{}{0+p_0}$							$\frac{}{3+p_0}$	$\frac{}{p_0+2}$
2 1 3 0 1 0 2 3 3 2 0 1 0 3 1 2	s_{369}	Quasigroup Commutative	x				$\frac{}{3+p_0}$ $\frac{}{p_0+3}$		$\frac{}{1+p_0}$ $\frac{}{p_0+1}$									$\frac{}{0+p_0}$ $\frac{}{p_0+0}$							$\frac{}{2+p_0}$ $\frac{}{p_0+2}$	
2 1 3 0 1 2 0 3 0 3 2 1 3 0 1 2	s_{371}	Quasigroup	x				$\frac{}{p_0+3}$	$\frac{}{2+p_0}$			$\frac{}{1+p_0}$	$\frac{}{p_0+1}$					$\frac{}{p_0+0}$	$\frac{}{0+p_0}$			$\frac{}{3+p_0}$	$\frac{}{p_0+2}$				
2 1 3 0 1 2 0 3 3 0 1 2 0 3 2 1	s_{372}	Quasigroup Commutative	x					$\frac{}{3+p_0}$ $\frac{}{p_0+3}$			$\frac{}{1+p_0}$ $\frac{}{p_0+1}$							$\frac{}{0+p_0}$ $\frac{}{p_0+0}$			$\frac{}{2+p_0}$ $\frac{}{p_0+2}$					
2 1 3 0 1 3 0 2 0 2 1 3 3 0 2 1	s_{374}	Quasigroup	x		$\frac{}{2+p_0}$	$\frac{}{p_0+3}$							$\frac{}{1+p_0}$	$\frac{}{p_0+1}$			$\frac{}{p_0+0}$	$\frac{}{0+p_0}$			$\frac{}{p_0+2}$	$\frac{}{3+p_0}$				
2 1 3 0 1 3 0 2 3 0 2 1 0 2 1 3	s_{375}	Quasigroup Commutative	x		$\frac{}{3+p_0}$ $\frac{}{p_0+3}$								$\frac{}{1+p_0}$ $\frac{}{p_0+1}$					$\frac{}{0+p_0}$ $\frac{}{p_0+0}$				$\frac{}{2+p_0}$ $\frac{}{p_0+2}$				
2 1 3 0 3 0 1 2 0 3 2 1 1 2 0 3	s_{376}	Quasigroup	x		$\frac{}{p_0+3}$			$\frac{}{2+p_0}$		$\frac{}{p_0+1}$	$\frac{}{3+p_0}$							$\frac{}{0+p_0}$	$\frac{}{p_0+0}$		$\frac{}{1+p_0}$			$\frac{}{p_0+2}$		
2 1 3 0 3 0 1 2 1 2 0 3 0 3 2 1	s_{377}	Quasigroup	x			$\frac{}{p_0+3}$		$\frac{}{3+p_0}$	$\frac{}{p_0+1}$		$\frac{}{2+p_0}$							$\frac{}{0+p_0}$		$\frac{}{p_0+0}$	$\frac{}{1+p_0}$		$\frac{}{p_0+2}$			
2 1 3 0 3 0 2 1 0 2 1 3 1 3 0 2	s_{378}	Quasigroup	x	$\frac{}{p_0+3}$	$\frac{}{2+p_0}$				$\frac{}{p_0+1}$				$\frac{}{3+p_0}$					$\frac{}{0+p_0}$	$\frac{}{p_0+0}$			$\frac{}{1+p_0}$				$\frac{}{p_0+2}$
2 1 3 0 3 0 2 1 1 3 0 2 0 2 1 3	s_{381}	Quasigroup Left Identity	x $\frac{}{p_0+3}$		$\frac{}{3+p_0}$					$\frac{}{p_0+1}$			$\frac{}{2+p_0}$					$\frac{}{0+p_0}$		$\frac{}{p_0+0}$		$\frac{}{1+p_0}$			$\frac{}{p_0+2}$	
2 1 3 0 3 2 0 1 0 3 1 2 1 0 2 3	s_{382}	Quasigroup Left Identity	x $\frac{}{p_0+3}$				$\frac{}{2+p_0}$		$\frac{}{3+p_0}$			$\frac{}{p_0+1}$						$\frac{}{0+p_0}$	$\frac{}{p_0+0}$		$\frac{}{p_0+2}$				$\frac{}{1+p_0}$	
2 1 3 0 3 2 0 1 1 0 2 3 0 3 1 2	s_{383}	Quasigroup	x	$\frac{}{p_0+3}$			$\frac{}{3+p_0}$		$\frac{}{2+p_0}$		$\frac{}{p_0+1}$							$\frac{}{0+p_0}$		$\frac{}{p_0+0}$		$\frac{}{p_0+2}$			$\frac{}{1+p_0}$	
2 3 0 1 0 1 2 3 1 2 3 0 3 0 1 2	s_{385}	Quasigroup Right Identity	x $\frac{}{1+p_0}$			$\frac{}{p_0+2}$						$\frac{}{2+p_0}$	$\frac{}{p_0+3}$		$\frac{}{p_0+0}$				$\frac{}{0+p_0}$		$\frac{}{3+p_0}$			$\frac{}{p_0+1}$		
2 3 0 1 0 1 2 3 3 0 1 2 1 2 3 0	s_{386}	Quasigroup Right Identity	x $\frac{}{1+p_0}$		$\frac{}{p_0+2}$							$\frac{}{3+p_0}$		$\frac{}{p_0+3}$		$\frac{}{p_0+0}$			$\frac{}{0+p_0}$		$\frac{}{2+p_0}$		$\frac{}{p_0+1}$			
2 3 0 1 0 1 3 2 1 0 2 3 3 2 1 0	s_{388}	Quasigroup	x	$\frac{}{1+p_0}$				$\frac{}{p_0+2}$	$\frac{}{2+p_0}$			$\frac{}{p_0+3}$			$\frac{}{p_0+0}$				$\frac{}{0+p_0}$				$\frac{}{p_0+1}$			$\frac{}{3+p_0}$
2 3 0 1 0 1 3 2 3 2 1 0 1 0 2 3	s_{389}	Quasigroup	x	$\frac{}{1+p_0}$			$\frac{}{p_0+2}$		$\frac{}{3+p_0}$		$\frac{}{p_0+3}$					$\frac{}{p_0+0}$			$\frac{}{0+p_0}$					$\frac{}{p_0+1}$		$\frac{}{2+p_0}$
2 3 0 1 0 2 1 3 1 0 3 2 3 1 2 0	s_{390}	Quasigroup	x	$\frac{}{p_0+2}$	$\frac{}{1+p_0}$					$\frac{}{2+p_0}$				$\frac{}{p_0+3}$	$\frac{}{p_0+0}$				$\frac{}{0+p_0}$					$\frac{}{3+p_0}$	$\frac{}{p_0+1}$	
2 3 0 1 1 0 2 3 0 1 3 2 3 2 1 0	s_{392}	Quasigroup	x	$\frac{}{2+p_0}$		$\frac{}{p_0+2}$			$\frac{}{1+p_0}$					$\frac{}{p_0+3}$			$\frac{}{p_0+0}$		$\frac{}{0+p_0}$		$\frac{}{p_0+1}$					$\frac{}{3+p_0}$
2 3 0 1 1 0 2 3 3 2 1 0 0 1 3 2	s_{393}	Quasigroup	x	$\frac{}{3+p_0}$	$\frac{}{p_0+2}$				$\frac{}{1+p_0}$				$\frac{}{p_0+3}$					$\frac{}{p_0+0}$	$\frac{}{0+p_0}$			$\frac{}{p_0+1}$				$\frac{}{2+p_0}$
2 3 0 1 1 0 3 2 0 2 1 3 3 1 2 0	s_{395}	Quasigroup	x		$\frac{}{2+p_0}$		$\frac{}{p_0+2}$			$\frac{}{1+p_0}$		$\frac{}{p_0+3}$					$\frac{}{p_0+0}$		$\frac{}{0+p_0}$			$\frac{}{p_0+1}$		$\frac{}{3+p_0}$		
2 3 0 1 1 0 3 2 3 1 2 0 0 2 1 3	s_{396}	Quasigroup	x		$\frac{}{3+p_0}$			$\frac{}{p_0+2}$		$\frac{}{1+p_0}$	$\frac{}{p_0+3}$							$\frac{}{p_0+0}$	$\frac{}{0+p_0}$		$\frac{}{p_0+1}$			$\frac{}{2+p_0}$		
2 3 0 1 1 2 3 0 3 0 1 2 0 1 2 3	s_{399}	Quasigroup Right Identity	x $\frac{}{3+p_0}$				$\frac{}{p_0+2}$		$\frac{}{p_0+3}$			$\frac{}{1+p_0}$						$\frac{}{p_0+0}$	$\frac{}{0+p_0}$		$\frac{}{2+p_0}$				$\frac{}{p_0+1}$	
2 3 0 1 3 0 1 2 1 2 3 0 0 1 2 3	s_{401}	Quasigroup Right Identity	x $\frac{}{3+p_0}$	$\frac{}{p_0+2}$							$\frac{}{p_0+3}$	$\frac{}{2+p_0}$							$\frac{}{0+p_0}$	$\frac{}{p_0+0}$	$\frac{}{1+p_0}$	$\frac{}{p_0+1}$				
2 3 0 1 3 1 2 0 1 0 3 2 0 2 1 3	s_{403}	Quasigroup	x		$\frac{}{3+p_0}$	$\frac{}{p_0+2}$			$\frac{}{p_0+3}$	$\frac{}{2+p_0}$									$\frac{}{0+p_0}$	$\frac{}{p_0+0}$			$\frac{}{p_0+1}$	$\frac{}{1+p_0}$		
2 3 1 0 0 1 2 3 1 0 3 2 3 2 0 1	s_{408}	Quasigroup Right Identity	x $\frac{}{1+p_0}$					$\frac{}{p_0+3}$		$\frac{}{2+p_0}$		$\frac{}{p_0+2}$			$\frac{}{p_0+0}$					$\frac{}{0+p_0}$			$\frac{}{p_0+1}$		$\frac{}{3+p_0}$	
2 3 1 0 0 1 2 3 3 2 0 1 1 0 3 2	s_{409}	Quasigroup Right Identity	x $\frac{}{1+p_0}$				$\frac{}{p_0+3}$			$\frac{}{3+p_0}$	$\frac{}{p_0+2}$					$\frac{}{p_0+0}$				$\frac{}{0+p_0}$				$\frac{}{p_0+1}$	$\frac{}{2+p_0}$	
2 3 1 0 0 1 3 2 1 2 0 3 3 0 2 1	s_{411}	Quasigroup	x	$\frac{}{1+p_0}$		$\frac{}{p_0+3}$					$\frac{}{2+p_0}$		$\frac{}{p_0+2}$		$\frac{}{p_0+0}$					$\frac{}{0+p_0}$		$\frac{}{3+p_0}$		$\frac{}{p_0+1}$		
2 3 1 0 0 1 3 2 3 0 2 1 1 2 0 3	s_{412}	Quasigroup	x	$\frac{}{1+p_0}$	$\frac{}{p_0+3}$						$\frac{}{3+p_0}$			$\frac{}{p_0+2}$		$\frac{}{p_0+0}$				$\frac{}{0+p_0}$		$\frac{}{2+p_0}$	$\frac{}{p_0+1}$			
2 3 1 0 0 2 3 1 1 0 2 3 3 1 0 2	s_{414}	Quasigroup	x	$\frac{}{p_0+3}$		$\frac{}{1+p_0}$			$\frac{}{2+p_0}$					$\frac{}{p_0+2}$	$\frac{}{p_0+0}$					$\frac{}{0+p_0}$			$\frac{}{3+p_0}$		$\frac{}{p_0+1}$	
2 3 1 0 0 2 3 1 3 1 0 2 1 0 2 3	s_{415}	Quasigroup Left Identity	x $\frac{}{p_0+3}$			$\frac{}{1+p_0}$			$\frac{}{3+p_0}$				$\frac{}{p_0+2}$			$\frac{}{p_0+0}$				$\frac{}{0+p_0}$			$\frac{}{2+p_0}$			$\frac{}{p_0+1}$
2 3 1 0 1 0 2 3 0 2 3 1 3 1 0 2	s_{417}	Quasigroup	x			$\frac{}{2+p_0}$	$\frac{}{p_0+3}$		$\frac{}{1+p_0}$			$\frac{}{p_0+2}$					$\frac{}{p_0+0}$			$\frac{}{0+p_0}$		$\frac{}{p_0+1}$	$\frac{}{3+p_0}$			
2 3 1 0 1 0 2 3 3 1 0 2 0 2 3 1	s_{418}	Quasigroup	x			$\frac{}{3+p_0}$		$\frac{}{p_0+3}$	$\frac{}{1+p_0}$		$\frac{}{p_0+2}$							$\frac{}{p_0+0}$		$\frac{}{0+p_0}$	$\frac{}{p_0+1}$		$\frac{}{2+p_0}$			
2 3 1 0 1 0 3 2 0 1 2 3 3 2 0 1	s_{420}	Quasigroup Right Identity	x $\frac{}{2+p_0}$			$\frac{}{p_0+3}$				$\frac{}{1+p_0}$				$\frac{}{p_0+2}$			$\frac{}{p_0+0}$			$\frac{}{0+p_0}$	$\frac{}{p_0+1}$				$\frac{}{3+p_0}$	
2 3 1 0 1 0 3 2 3 2 0 1 0 1 2 3	s_{421}	Quasigroup Right Identity	x $\frac{}{3+p_0}$		$\frac{}{p_0+3}$					$\frac{}{1+p_0}$			$\frac{}{p_0+2}$					$\frac{}{p_0+0}$		$\frac{}{0+p_0}$		$\frac{}{p_0+1}$			$\frac{}{2+p_0}$	
2 3 1 0 1 2 0 3 0 1 3 2 3 0 2 1	s_{422}	Quasigroup	x	$\frac{}{2+p_0}$				$\frac{}{p_0+3}$		$\frac{}{p_0+2}$	$\frac{}{1+p_0}$						$\frac{}{p_0+0}$			$\frac{}{0+p_0}$		$\frac{}{3+p_0}$				$\frac{}{p_0+1}$
2 3 1 0 1 2 0 3 3 0 2 1 0 1 3 2	s_{423}	Quasigroup	x	$\frac{}{3+p_0}$			$\frac{}{p_0+3}$		$\frac{}{p_0+2}$		$\frac{}{1+p_0}$							$\frac{}{p_0+0}$		$\frac{}{0+p_0}$		$\frac{}{2+p_0}$			$\frac{}{p_0+1}$	
2 3 1 0 3 0 2 1 0 1 3 2 1 2 0 3	s_{424}	Quasigroup Left Identity	x $\frac{}{p_0+3}$	$\frac{}{2+p_0}$							$\frac{}{3+p_0}$	$\frac{}{p_0+2}$							$\frac{}{p_0+0}$	$\frac{}{0+p_0}$	$\frac{}{p_0+1}$	$\frac{}{1+p_0}$				
2 3 1 0 3 0 2 1 1 2 0 3 0 1 3 2	s_{425}	Quasigroup Commutative	x	$\frac{}{3+p_0}$ $\frac{}{p_0+3}$							$\frac{}{2+p_0}$ $\frac{}{p_0+2}$									$\frac{}{0+p_0}$ $\frac{}{p_0+0}$		$\frac{}{1+p_0}$ $\frac{}{p_0+1}$				
2 3 1 0 3 1 0 2 0 2 3 1 1 0 2 3	s_{426}	Quasigroup	x		$\frac{}{p_0+3}$	$\frac{}{2+p_0}$			$\frac{}{3+p_0}$	$\frac{}{p_0+2}$									$\frac{}{p_0+0}$	$\frac{}{0+p_0}$			$\frac{}{1+p_0}$	$\frac{}{p_0+1}$		
2 3 1 0 3 1 0 2 1 0 2 3 0 2 3 1	s_{427}	Quasigroup Commutative	x			$\frac{}{3+p_0}$ $\frac{}{p_0+3}$			$\frac{}{2+p_0}$ $\frac{}{p_0+2}$											$\frac{}{0+p_0}$ $\frac{}{p_0+0}$			$\frac{}{1+p_0}$ $\frac{}{p_0+1}$			
3 0 1 2 0 1 2 3 2 3 0 1 1 2 3 0	s_{433}	Quasigroup Right Identity	x $\frac{}{1+p_0}$	$\frac{}{p_0+1}$							$\frac{}{p_0+2}$	$\frac{}{3+p_0}$							$\frac{}{2+p_0}$	$\frac{}{p_0+3}$	$\frac{}{0+p_0}$	$\frac{}{p_0+0}$				
3 0 1 2 0 2 3 1 1 3 2 0 2 1 0 3	s_{434}	Quasigroup Commutative	x			$\frac{}{1+p_0}$ $\frac{}{p_0+1}$								$\frac{}{2+p_0}$ $\frac{}{p_0+2}$			$\frac{}{3+p_0}$ $\frac{}{p_0+3}$				$\frac{}{0+p_0}$ $\frac{}{p_0+0}$					
3 0 1 2 0 2 3 1 2 1 0 3 1 3 2 0	s_{435}	Quasigroup	x		$\frac{}{p_0+1}$	$\frac{}{1+p_0}$							$\frac{}{p_0+2}$	$\frac{}{3+p_0}$			$\frac{}{2+p_0}$	$\frac{}{p_0+3}$			$\frac{}{0+p_0}$	$\frac{}{p_0+0}$				
3 0 1 2 0 3 2 1 1 2 0 3 2 1 3 0	s_{436}	Quasigroup Commutative	x					$\frac{}{1+p_0}$ $\frac{}{p_0+1}$			$\frac{}{2+p_0}$ $\frac{}{p_0+2}$							$\frac{}{3+p_0}$ $\frac{}{p_0+3}$			$\frac{}{0+p_0}$ $\frac{}{p_0+0}$					
3 0 1 2 0 3 2 1 2 1 3 0 1 2 0 3	s_{439}	Quasigroup	x				$\frac{}{p_0+1}$	$\frac{}{1+p_0}$			$\frac{}{3+p_0}$	$\frac{}{p_0+2}$					$\frac{}{p_0+3}$	$\frac{}{2+p_0}$			$\frac{}{0+p_0}$	$\frac{}{p_0+0}$				
3 0 1 2 1 2 0 3 0 3 2 1 2 1 3 0	s_{440}	Quasigroup	x			$\frac{}{p_0+1}$		$\frac{}{2+p_0}$	$\frac{}{p_0+2}$		$\frac{}{1+p_0}$							$\frac{}{3+p_0}$		$\frac{}{p_0+3}$	$\frac{}{0+p_0}$		$\frac{}{p_0+0}$			
3 0 1 2 1 2 0 3 2 1 3 0 0 3 2 1	s_{441}	Quasigroup	x		$\frac{}{p_0+1}$			$\frac{}{3+p_0}$		$\frac{}{p_0+2}$	$\frac{}{1+p_0}$							$\frac{}{2+p_0}$	$\frac{}{p_0+3}$		$\frac{}{0+p_0}$			$\frac{}{p_0+0}$		
3 0 1 2 1 2 3 0 0 1 2 3 2 3 0 1	s_{442}	Quasigroup Right Identity	x $\frac{}{2+p_0}$		$\frac{}{p_0+1}$							$\frac{}{1+p_0}$		$\frac{}{p_0+2}$		$\frac{}{p_0+3}$			$\frac{}{3+p_0}$		$\frac{}{0+p_0}$		$\frac{}{p_0+0}$			
3 0 1 2 1 2 3 0 2 3 0 1 0 1 2 3	s_{445}	Quasigroup Right Identity	x $\frac{}{3+p_0}$			$\frac{}{p_0+1}$						$\frac{}{1+p_0}$	$\frac{}{p_0+2}$		$\frac{}{p_0+3}$				$\frac{}{2+p_0}$		$\frac{}{0+p_0}$			$\frac{}{p_0+0}$		
3 0 1 2 1 3 2 0 0 2 3 1 2 1 0 3	s_{446}	Quasigroup	x			$\frac{}{2+p_0}$		$\frac{}{p_0+1}$				$\frac{}{p_0+2}$		$\frac{}{1+p_0}$	$\frac{}{p_0+3}$		$\frac{}{3+p_0}$				$\frac{}{0+p_0}$		$\frac{}{p_0+0}$			
3 0 1 2 1 3 2 0 2 1 0 3 0 2 3 1	s_{447}	Quasigroup	x			$\frac{}{3+p_0}$	$\frac{}{p_0+1}$				$\frac{}{p_0+2}$			$\frac{}{1+p_0}$		$\frac{}{p_0+3}$	$\frac{}{2+p_0}$				$\frac{}{0+p_0}$			$\frac{}{p_0+0}$		
3 0 1 2 2 1 0 3 0 2 3 1 1 3 2 0	s_{448}	Quasigroup Left Identity	x $\frac{}{p_0+1}$			$\frac{}{2+p_0}$				$\frac{}{p_0+2}$				$\frac{}{3+p_0}$			$\frac{}{1+p_0}$			$\frac{}{p_0+3}$	$\frac{}{0+p_0}$					$\frac{}{p_0+0}$	
3 0 1 2 2 1 0 3 1 3 2 0 0 2 3 1	s_{451}	Quasigroup	x	$\frac{}{p_0+1}$		$\frac{}{3+p_0}$			$\frac{}{p_0+2}$					$\frac{}{2+p_0}$			$\frac{}{1+p_0}$		$\frac{}{p_0+3}$		$\frac{}{0+p_0}$					$\frac{}{p_0+0}$
3 0 1 2 2 1 3 0 0 3 2 1 1 2 0 3	s_{452}	Quasigroup	x	$\frac{}{p_0+1}$				$\frac{}{2+p_0}$			$\frac{}{3+p_0}$			$\frac{}{p_0+2}$	$\frac{}{p_0+3}$			$\frac{}{1+p_0}$			$\frac{}{0+p_0}$				$\frac{}{p_0+0}$	
3 0 1 2 2 1 3 0 1 2 0 3 0 3 2 1	s_{453}	Quasigroup Left Identity	x $\frac{}{p_0+1}$					$\frac{}{3+p_0}$			$\frac{}{2+p_0}$		$\frac{}{p_0+2}$			$\frac{}{p_0+3}$		$\frac{}{1+p_0}$			$\frac{}{0+p_0}$					$\frac{}{p_0+0}$
3 0 1 2 2 3 0 1 0 1 2 3 1 2 3 0	s_{454}	Quasigroup Right Identity	x $\frac{}{2+p_0}$				$\frac{}{p_0+1}$		$\frac{}{p_0+2}$			$\frac{}{3+p_0}$						$\frac{}{p_0+3}$	$\frac{}{1+p_0}$		$\frac{}{0+p_0}$				$\frac{}{p_0+0}$	
3 0 2 1 0 1 3 2 1 2 0 3 2 3 1 0	s_{456}	Quasigroup Left Identity	x $\frac{}{p_0+1}$	$\frac{}{1+p_0}$							$\frac{}{2+p_0}$	$\frac{}{p_0+3}$							$\frac{}{p_0+2}$	$\frac{}{3+p_0}$	$\frac{}{p_0+0}$	$\frac{}{0+p_0}$				
3 0 2 1 0 1 3 2 2 3 1 0 1 2 0 3	s_{457}	Quasigroup Commutative	x	$\frac{}{1+p_0}$ $\frac{}{p_0+1}$							$\frac{}{3+p_0}$ $\frac{}{p_0+3}$									$\frac{}{2+p_0}$ $\frac{}{p_0+2}$		$\frac{}{0+p_0}$ $\frac{}{p_0+0}$				
3 0 2 1 0 2 1 3 1 3 0 2 2 1 3 0	s_{458}	Quasigroup	x		$\frac{}{1+p_0}$	$\frac{}{p_0+1}$							$\frac{}{2+p_0}$	$\frac{}{p_0+3}$			$\frac{}{p_0+2}$	$\frac{}{3+p_0}$			$\frac{}{p_0+0}$	$\frac{}{0+p_0}$				
3 0 2 1 0 2 1 3 2 1 3 0 1 3 0 2	s_{459}	Quasigroup Commutative	x		$\frac{}{1+p_0}$ $\frac{}{p_0+1}$								$\frac{}{3+p_0}$ $\frac{}{p_0+3}$					$\frac{}{2+p_0}$ $\frac{}{p_0+2}$				$\frac{}{0+p_0}$ $\frac{}{p_0+0}$				
3 0 2 1 0 3 1 2 1 2 3 0 2 1 0 3	s_{461}	Quasigroup	x				$\frac{}{1+p_0}$	$\frac{}{p_0+1}$			$\frac{}{p_0+3}$	$\frac{}{2+p_0}$					$\frac{}{3+p_0}$	$\frac{}{p_0+2}$			$\frac{}{p_0+0}$	$\frac{}{0+p_0}$				
3 0 2 1 0 3 1 2 2 1 0 3 1 2 3 0	s_{462}	Quasigroup Commutative	x				$\frac{}{1+p_0}$ $\frac{}{p_0+1}$					$\frac{}{3+p_0}$ $\frac{}{p_0+3}$					$\frac{}{2+p_0}$ $\frac{}{p_0+2}$					$\frac{}{0+p_0}$ $\frac{}{p_0+0}$				
3 0 2 1 1 2 0 3 0 1 3 2 2 3 1 0	s_{464}	Quasigroup	x	$\frac{}{2+p_0}$	$\frac{}{p_0+1}$						$\frac{}{1+p_0}$			$\frac{}{p_0+3}$		$\frac{}{p_0+2}$				$\frac{}{3+p_0}$		$\frac{}{0+p_0}$	$\frac{}{p_0+0}$			
3 0 2 1 1 2 0 3 2 3 1 0 0 1 3 2	s_{467}	Quasigroup	x	$\frac{}{3+p_0}$		$\frac{}{p_0+1}$					$\frac{}{1+p_0}$		$\frac{}{p_0+3}$		$\frac{}{p_0+2}$					$\frac{}{2+p_0}$		$\frac{}{0+p_0}$		$\frac{}{p_0+0}$		
3 0 2 1 1 2 3 0 0 3 1 2 2 1 0 3	s_{468}	Quasigroup	x			$\frac{}{p_0+1}$	$\frac{}{2+p_0}$		$\frac{}{p_0+3}$			$\frac{}{1+p_0}$					$\frac{}{3+p_0}$			$\frac{}{p_0+2}$		$\frac{}{0+p_0}$	$\frac{}{p_0+0}$			
3 0 2 1 1 2 3 0 2 1 0 3 0 3 1 2	s_{469}	Quasigroup	x		$\frac{}{p_0+1}$		$\frac{}{3+p_0}$			$\frac{}{p_0+3}$		$\frac{}{1+p_0}$					$\frac{}{2+p_0}$		$\frac{}{p_0+2}$			$\frac{}{0+p_0}$		$\frac{}{p_0+0}$		
3 0 2 1 1 3 0 2 0 2 1 3 2 1 3 0	s_{470}	Quasigroup	x		$\frac{}{2+p_0}$			$\frac{}{p_0+1}$				$\frac{}{p_0+3}$	$\frac{}{1+p_0}$		$\frac{}{p_0+2}$			$\frac{}{3+p_0}$				$\frac{}{0+p_0}$	$\frac{}{p_0+0}$			
3 0 2 1 1 3 0 2 2 1 3 0 0 2 1 3	s_{471}	Quasigroup	x		$\frac{}{3+p_0}$		$\frac{}{p_0+1}$				$\frac{}{p_0+3}$		$\frac{}{1+p_0}$			$\frac{}{p_0+2}$		$\frac{}{2+p_0}$				$\frac{}{0+p_0}$		$\frac{}{p_0+0}$		
3 0 2 1 2 1 0 3 0 3 1 2 1 2 3 0	s_{472}	Quasigroup	x	$\frac{}{p_0+1}$			$\frac{}{2+p_0}$					$\frac{}{3+p_0}$		$\frac{}{p_0+3}$	$\frac{}{p_0+2}$		$\frac{}{1+p_0}$					$\frac{}{0+p_0}$			$\frac{}{p_0+0}$	
3 0 2 1 2 1 0 3 1 2 3 0 0 3 1 2	s_{473}	Quasigroup Left Identity	x $\frac{}{p_0+1}$				$\frac{}{3+p_0}$					$\frac{}{2+p_0}$	$\frac{}{p_0+3}$			$\frac{}{p_0+2}$	$\frac{}{1+p_0}$					$\frac{}{0+p_0}$				$\frac{}{p_0+0}$
3 0 2 1 2 1 3 0 0 2 1 3 1 3 0 2	s_{474}	Quasigroup Left Identity	x $\frac{}{p_0+1}$		$\frac{}{2+p_0}$					$\frac{}{p_0+3}$			$\frac{}{3+p_0}$					$\frac{}{1+p_0}$		$\frac{}{p_0+2}$		$\frac{}{0+p_0}$			$\frac{}{p_0+0}$	
3 0 2 1 2 1 3 0 1 3 0 2 0 2 1 3	s_{477}	Quasigroup	x	$\frac{}{p_0+1}$	$\frac{}{3+p_0}$				$\frac{}{p_0+3}$				$\frac{}{2+p_0}$					$\frac{}{1+p_0}$	$\frac{}{p_0+2}$			$\frac{}{0+p_0}$				$\frac{}{p_0+0}$
3 0 2 1 2 3 1 0 0 1 3 2 1 2 0 3	s_{478}	Quasigroup	x	$\frac{}{2+p_0}$			$\frac{}{p_0+1}$		$\frac{}{p_0+3}$		$\frac{}{3+p_0}$							$\frac{}{p_0+2}$		$\frac{}{1+p_0}$		$\frac{}{0+p_0}$			$\frac{}{p_0+0}$	
3 0 2 1 2 3 1 0 1 2 0 3 0 1 3 2	s_{479}	Quasigroup	x	$\frac{}{3+p_0}$				$\frac{}{p_0+1}$		$\frac{}{p_0+3}$	$\frac{}{2+p_0}$						$\frac{}{p_0+2}$			$\frac{}{1+p_0}$		$\frac{}{0+p_0}$				$\frac{}{p_0+0}$
3 1 0 2 0 2 1 3 1 3 2 0 2 0 3 1	s_{480}	Quasigroup Left Identity	x $\frac{}{p_0+2}$		$\frac{}{1+p_0}$							$\frac{}{p_0+1}$		$\frac{}{2+p_0}$		$\frac{}{3+p_0}$			$\frac{}{p_0+3}$		$\frac{}{p_0+0}$		$\frac{}{0+p_0}$			
3 1 0 2 0 2 1 3 2 0 3 1 1 3 2 0	s_{481}	Quasigroup	x	$\frac{}{p_0+2}$	$\frac{}{1+p_0}$						$\frac{}{p_0+1}$			$\frac{}{3+p_0}$		$\frac{}{2+p_0}$				$\frac{}{p_0+3}$		$\frac{}{p_0+0}$	$\frac{}{0+p_0}$			
3 1 0 2 0 2 3 1 1 0 2 3 2 3 1 0	s_{482}	Quasigroup	x			$\frac{}{1+p_0}$		$\frac{}{p_0+2}$	$\frac{}{2+p_0}$		$\frac{}{p_0+1}$							$\frac{}{p_0+3}$		$\frac{}{3+p_0}$	$\frac{}{p_0+0}$		$\frac{}{0+p_0}$			
3 1 0 2 0 2 3 1 2 3 1 0 1 0 2 3	s_{485}	Quasigroup	x			$\frac{}{1+p_0}$	$\frac{}{p_0+2}$		$\frac{}{3+p_0}$			$\frac{}{p_0+1}$					$\frac{}{p_0+3}$			$\frac{}{2+p_0}$		$\frac{}{p_0+0}$	$\frac{}{0+p_0}$			
3 1 0 2 0 3 2 1 1 2 3 0 2 0 1 3	s_{486}	Quasigroup	x			$\frac{}{p_0+2}$		$\frac{}{1+p_0}$				$\frac{}{2+p_0}$		$\frac{}{p_0+1}$	$\frac{}{3+p_0}$		$\frac{}{p_0+3}$				$\frac{}{p_0+0}$		$\frac{}{0+p_0}$			
3 1 0 2 0 3 2 1 2 0 1 3 1 2 3 0	s_{487}	Quasigroup	x		$\frac{}{p_0+2}$			$\frac{}{1+p_0}$				$\frac{}{3+p_0}$	$\frac{}{p_0+1}$		$\frac{}{2+p_0}$			$\frac{}{p_0+3}$				$\frac{}{p_0+0}$	$\frac{}{0+p_0}$			
3 1 0 2 1 0 2 3 0 2 3 1 2 3 1 0	s_{488}	Quasigroup Commutative	x			$\frac{}{2+p_0}$ $\frac{}{p_0+2}$			$\frac{}{1+p_0}$ $\frac{}{p_0+1}$											$\frac{}{3+p_0}$ $\frac{}{p_0+3}$			$\frac{}{0+p_0}$ $\frac{}{p_0+0}$			
3 1 0 2 1 0 2 3 2 3 1 0 0 2 3 1	s_{489}	Quasigroup	x		$\frac{}{p_0+2}$	$\frac{}{3+p_0}$			$\frac{}{1+p_0}$	$\frac{}{p_0+1}$									$\frac{}{p_0+3}$	$\frac{}{2+p_0}$			$\frac{}{0+p_0}$	$\frac{}{p_0+0}$		

	#		P0	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23
3 1 0 2 / 1 2 3 0 / 0 3 2 1 / 2 0 1 3	#490	Quasigroup Commutative	x					2+p0 / p0+2				1+p0 / p0+1			3+p0 / p0+2								0+p0 / p0+0			
3 1 0 2 / 1 2 3 0 / 2 0 1 3 / 0 3 2 1	#491	Quasigroup	x				p0+2	3+p0			p0+1	1+p0			2+p0	p0+3							0+p0	p0+0		
3 1 0 2 / 1 3 2 0 / 0 2 1 3 / 2 0 3 1	#492	Quasigroup Commutative	x		2+p0 / p0+2								1+p0		3+p0 / p0+3								0+p0 / p0+0			
3 1 0 2 / 1 3 2 0 / 2 0 3 1 / 0 2 1 3	#495	Quasigroup	x		3+p0	p0+2							p0+1	1+p0	p0+3	2+p0							0+p0	p0+0		
3 1 0 2 / 2 0 1 3 / 0 3 2 1 / 1 3 0 2	#497	Quasigroup Left Identity	x / p0+2					2+p0		p0+1		3+p0			1+p0					p0+3			0+p0		p0+0	
3 1 0 2 / 2 0 1 3 / 1 2 3 0 / 0 3 2 1	#498	Quasigroup	x	p0+2				3+p0	p0+1			2+p0			1+p0				p0+3				0+p0			p0+0
3 1 0 2 / 2 0 3 1 / 0 2 1 3 / 1 3 2 0	#500	Quasigroup	x		2+p0		p0+2		p0+1				3+p0		1+p0		p0+3					0+p0		p0+0	
3 1 0 2 / 2 0 3 1 / 1 3 2 0 / 0 2 1 3	#501	Quasigroup	x		3+p0		p0+2		p0+1				2+p0		1+p0	p0+3						0+p0			p0+0
3 1 0 2 / 2 3 1 0 / 0 2 3 1 / 1 0 2 3	#502	Quasigroup	x	p0+2		2+p0			3+p0				p0+1	p0+3						1+p0			0+p0		p0+0	
3 1 0 2 / 2 3 1 0 / 1 0 2 3 / 0 2 3 1	#503	Quasigroup Left Identity	x / p0+2		3+p0			2+p0			p0+1			p0+3					1+p0			0+p0			p0+0
3 1 2 0 / 0 2 1 3 / 1 0 3 2 / 2 3 0 1	#504	Quasigroup	x		1+p0		p0+3		2+p0	p0+1								p0+2	3+p0		p0+0			0+p0	
3 1 2 0 / 0 2 1 3 / 2 3 0 1 / 1 0 3 2	#507	Quasigroup	x		1+p0		p0+3		3+p0	p0+1						p0+2		2+p0			p0+0			0+p0	
3 1 2 0 / 0 2 3 1 / 1 3 0 2 / 2 0 1 3	#508	Quasigroup Left Identity	x / p0+3		1+p0					p0+1	2+p0		3+p0					p0+2		p0+0			0+p0		
3 1 2 0 / 0 2 3 1 / 2 0 1 3 / 1 3 0 2	#509	Quasigroup	x	p0+3	1+p0				p0+1			3+p0		2+p0					p0+2		p0+0		0+p0		
3 1 2 0 / 1 2 0 3 / 0 3 1 2 / 2 0 3 1	#510	Quasigroup	x		p0+3	1+p0			2+p0			p0+1	3+p0	p0+2					p0+0				0+p0		
3 1 2 0 / 1 2 0 3 / 2 0 3 1 / 0 3 1 2	#511	Quasigroup	x		p0+3	1+p0			3+p0		p0+1		2+p0		p0+2					p0+0				0+p0	
3 1 2 0 / 1 3 0 2 / 0 2 1 3 / 2 0 3 1	#512	Quasigroup	x		2+p0	p0+3			p0+1	1+p0								3+p0	p0+2				p0+0	0+p0	
3 1 2 0 / 1 3 0 2 / 2 0 3 1 / 0 2 1 3	#514	Quasigroup	x			2+p0	p0+3		1+p0	p0+1					p0+2	3+p0							p0+0	0+p0	
3 1 2 0 / 1 2 0 3 / 2 0 3 1 / 0 3 1 2	#515	Quasigroup Commutative	x			3+p0 / p0+3			1+p0 / p0+1					2+p0 / p0+2									0+p0 / p0+0		
3 1 2 0 / 1 3 0 2 / 0 2 3 1 / 2 0 1 3	#517	Quasigroup	x		p0+3	2+p0						1+p0	p0+1	3+p0	p0+2								p0+0	0+p0	
3 1 2 0 / 1 3 0 2 / 2 0 1 3 / 0 2 3 1	#518	Quasigroup Commutative	x			3+p0 / p0+3						1+p0 / p0+1	2+p0 / p0+2									0+p0 / p0+0		
3 1 2 0 / 2 0 1 3 / 0 2 3 1 / 1 3 0 2	#520	Quasigroup	x		2+p0	p0+3		p0+1				3+p0		1+p0				p0+2					0+p0	p0+0	
3 1 2 0 / 2 0 1 3 / 1 3 0 2 / 0 2 3 1	#521	Quasigroup	x		3+p0		p0+3		p0+1			2+p0		1+p0		p0+2							0+p0		p0+0
3 1 2 0 / 2 0 3 1 / 0 3 1 2 / 1 2 0 3	#523	Quasigroup Left Identity	x / p0+3			2+p0			p0+1	3+p0			1+p0						p0+2			0+p0	p0+0		
3 1 2 0 / 2 0 3 1 / 1 2 0 3 / 0 3 1 2	#524	Quasigroup	x	p0+3		3+p0			p0+1	2+p0				1+p0					p0+2				0+p0		p0+0
3 1 2 0 / 2 3 0 1 / 0 2 1 3 / 1 0 3 2	#526	Quasigroup	x	p0+3	2+p0				3+p0				p0+1	p0+2					1+p0				0+p0	p0+0	
3 2 0 1 / 0 1 2 3 / 1 0 3 2 / 2 3 1 0	#528	Quasigroup Right Identity	x / 1+p0			p0+2				2+p0				p0+3			p0+1			3+p0	p0+0				0+p0
3 2 0 1 / 0 1 2 3 / 2 3 1 0 / 1 0 3 2	#529	Quasigroup Right Identity	x / 1+p0		p0+2					3+p0			p0+3					p0+1		2+p0		p0+0			0+p0
3 2 0 1 / 0 1 3 2 / 1 3 2 0 / 2 0 1 3	#531	Quasigroup	x	1+p0				p0+2			p0+3			2+p0	3+p0				p0+1			p0+0			0+p0
3 2 0 1 / 0 1 3 2 / 2 0 1 3 / 1 3 2 0	#532	Quasigroup	x	1+p0			p0+2					p0+3		3+p0	2+p0		p0+1					p0+0			0+p0
3 2 0 1 / 0 3 1 2 / 1 0 2 3 / 2 1 3 0	#534	Quasigroup Left Identity	x / p0+2				1+p0		2+p0			p0+3						3+p0	p0+1		p0+0			0+p0
3 2 0 1 / 0 3 1 2 / 2 1 3 0 / 1 0 2 3	#535	Quasigroup	x	p0+2			1+p0		3+p0		p0+3								2+p0		p0+1		p0+0		0+p0
3 2 0 1 / 1 0 2 3 / 0 3 1 2 / 2 1 3 0	#537	Quasigroup	x		p0+2		2+p0		1+p0				p0+3		p0+1	3+p0							p0+0		0+p0
3 2 0 1 / 1 0 2 3 / 2 1 3 0 / 0 3 1 2	#538	Quasigroup	x			p0+2	3+p0		1+p0				p0+3		p0+1				2+p0					p0+0	0+p0
3 2 0 1 / 1 0 3 2 / 0 1 2 3 / 2 3 1 0	#540	Quasigroup Right Identity	x / 2+p0					p0+2		1+p0		p0+3			p0+1					3+p0			p0+0		0+p0
3 2 0 1 / 1 0 3 2 / 2 3 1 0 / 0 1 2 3	#541	Quasigroup Right Identity	x / 3+p0			p0+2			1+p0	p0+3				p0+1					2+p0				p0+0	0+p0
3 2 0 1 / 1 3 2 0 / 0 1 3 2 / 2 0 1 3	#542	Quasigroup	x	2+p0		p0+2			p0+3					1+p0	3+p0					p0+1			p0+0		0+p0
3 2 0 1 / 1 3 2 0 / 2 0 1 3 / 0 1 3 2	#543	Quasigroup	x	3+p0	p0+2					p0+3				1+p0	2+p0				p0+1				p0+0		0+p0
3 2 0 1 / 2 0 1 3 / 0 1 3 2 / 1 3 2 0	#544	Quasigroup Commutative	x	2+p0 / p0+2									3+p0 / p0+3	1+p0 / p0+1								0+p0 / p0+0		
3 2 0 1 / 2 0 1 3 / 1 3 2 0 / 0 1 3 2	#545	Quasigroup Left Identity	x / p0+2	3+p0								p0+3	2+p0	1+p0	p0+1								0+p0	p0+0
3 2 0 1 / 2 1 3 0 / 0 3 1 2 / 1 0 2 3	#546	Quasigroup Commutative	x				2+p0 / p0+2		3+p0 / p0+3										1+p0 / p0+1			0+p0 / p0+0		
3 2 0 1 / 2 1 3 0 / 1 0 2 3 / 0 3 1 2	#547	Quasigroup	x				3+p0	p0+2	2+p0	p0+3							p0+1	1+p0				0+p0		0+p0
3 2 1 0 / 0 1 2 3 / 1 3 0 2 / 2 0 3 1	#553	Quasigroup Right Identity	x / 1+p0					p0+3		p0+2		2+p0			3+p0		p0+1			p0+0				0+p0
3 2 1 0 / 0 1 2 3 / 2 0 3 1 / 1 3 0 2	#554	Quasigroup Right Identity	x / 1+p0			p0+3					p0+2	3+p0		2+p0	p0+1					p0+0				0+p0
3 2 1 0 / 0 1 3 2 / 1 0 2 3 / 2 3 0 1	#556	Quasigroup	x	1+p0		p0+3			2+p0				p0+2			p0+1		3+p0		p0+0				0+p0
3 2 1 0 / 0 1 3 2 / 2 3 0 1 / 1 0 2 3	#557	Quasigroup	x	1+p0	p0+3				3+p0				p0+2			p0+1	2+p0			p0+0				0+p0
3 2 1 0 / 0 3 2 1 / 1 0 3 2 / 2 1 0 3	#559	Quasigroup	x	p0+3			1+p0		3+p0	p0+2					2+p0			p0+1		p0+0				0+p0
3 2 1 0 / 1 0 3 2 / 0 3 2 1 / 2 1 0 3	#560	Quasigroup	x	2+p0			p0+3	1+p0		p0+2				p0+1				3+p0				p0+0		0+p0
3 2 1 0 / 1 0 3 2 / 2 1 0 3 / 0 3 2 1	#561	Quasigroup	x	3+p0		p0+3	1+p0			p0+2				p0+1			2+p0					p0+0		0+p0
3 2 1 0 / 1 3 0 2 / 0 2 3 1 / 2 0 1 3	#563	Quasigroup	x		p0+3		2+p0	1+p0					p0+2	p0+1	3+p0						p0+0		0+p0
3 2 1 0 / 1 3 0 2 / 2 1 0 3 / 0 2 3 1	#564	Quasigroup	x		p0+3	3+p0	1+p0					p0+2	p0+1	2+p0							p0+0	0+p0
3 2 1 0 / 0 1 2 3 / 1 3 0 2 / 2 0 3 1	#566	Quasigroup Right Identity	x / 2+p0		p0+3			p0+2			1+p0			3+p0			p0+1		p0+0			0+p0
3 2 1 0 / 0 1 2 3 / 2 0 3 1 / 1 3 0 2	#568	Quasigroup Right Identity	x / 2+p0	p0+3						3+p0	p0+2	p0+1	1+p0							p0+0	0+p0
3 2 1 0 / 1 0 3 2 / 0 3 2 1 / 2 1 0 3	#570	Quasigroup	x		p0+3	2+p0	p0+2	3+p0								1+p0	p0+1				p0+0	0+p0
0 1 2 3 / 1 0 3 2 / 2 3 1 0 / 3 2 0 1	#1	Abelian	x / 0+p0 / p0+0	x / 0+p1 / p1+0					1+p1 / p0+1	1+p0 / p0+1									2+p1 / p1+2	2+p0 / p0+2					3+p0 / p0+3	3+p1 / p1+3
1 0 3 2 / 0 1 2 3 / 3 2 0 1 / 2 3 1 0	#170	Abelian	x / 1+p0 / p0+1	x / 1+p1 / p1+1					0+p1 / p1+0	0+p0 / p0+0									3+p1 / p1+3	3+p0 / p0+3					2+p0 / p0+2	2+p1 / p1+2
0 1 2 3 / 1 0 3 2 / 3 2 0 1 / 2 3 1 0	#2	Quasigroup Right Identity	x / 0+p0 / p1+0	x / p0+0 / 0+p1					p0+1 / 1+p1	1+p0 / p1+1									p0+2 / 3+p1	3+p0 / p1+2					2+p0 / p1+3	p0+3 / 2+p1
0 1 2 3 / 1 0 3 2 / 2 3 2 0 / 3 2 0 1	#3	Quasigroup Right Identity	x / 0+p0 / p1+0	x / p0+0 / 0+p1					p0+1 / 1+p1	1+p0 / p1+1									3+p0 / p1+2	p0+2 / 3+p1					p0+3 / 2+p1	2+p0 / p1+3
0 1 3 2 / 1 0 2 3 / 2 3 0 1 / 3 2 1 0	#24	Quasigroup Left Identity	x / p0+0 / 0+p1	x / 0+p0 / p1+0					1+p0 / p1+1	p0+1 / 1+p1									2+p0 / p1+3	p0+3 / 2+p1					p0+2 / 3+p1	3+p0 / p1+2
0 1 3 2 / 1 0 2 3 / 3 2 1 0 / 2 3 0 1	#25	Quasigroup Left Identity	x / p0+0 / 0+p1	x / 0+p0 / p1+0					1+p0 / p1+1	p0+1 / 1+p1									p0+3 / 2+p1	2+p0 / p1+3					3+p0 / p1+2	p0+2 / 3+p1
0 1 3 2 / 1 0 2 3 / 2 3 0 1 / 3 2 1 0	#26	Quasigroup Commutative	x / 0+p1 / p1+0	x / 0+p0 / p0+0					1+p0 / p0+1	1+p1 / p1+1									3+p1 / p1+3	3+p0 / p0+3					2+p0 / p0+2	2+p1 / p1+2
0 1 3 2 / 1 0 2 3 / 3 2 1 0 / 2 3 0 1	#27	Quasigroup Commutative	x / 0+p1 / p1+0	x / 0+p0 / p0+0					1+p0 / p0+1	1+p1 / p1+1									3+p0 / p0+3	3+p1 / p1+3					2+p1 / p1+2	2+p0 / p0+2
1 0 3 2 / 0 1 2 3 / 2 3 0 1 / 3 2 1 0	#144	Quasigroup Commutative	x / 1+p1 / p1+1	x / 1+p0 / p0+1					0+p1 / p0+0	0+p0 / p1+0									2+p0 / p0+2	2+p1 / p1+2					3+p1 / p1+3	3+p0 / p0+3
1 0 3 2 / 0 1 2 3 / 3 2 1 0 / 2 3 0 1	#145	Quasigroup Commutative	x / 1+p1 / p1+1	x / 1+p0 / p0+1					0+p1 / p0+0	0+p0 / p1+0									2+p1 / p1+2	2+p0 / p0+2					3+p0 / p0+3	3+p1 / p1+3
1 0 3 2 / 0 1 2 3 / 2 3 0 1 / 3 2 1 0	#146	Quasigroup Left Identity	x / p0+1 / 1+p1	x / 1+p0 / p0+1					0+p0 / p0+0	p0+0 / 0+p1									p0+2 / 3+p1	3+p0 / p1+2					2+p0 / p1+3	p0+3 / 2+p1
1 0 2 3 / 0 1 3 2 / 3 2 0 1 / 2 3 1 0	#147	Quasigroup Left Identity	x / p0+1 / 1+p1	x / 1+p0 / p0+1					0+p0 / p0+0	p0+0 / 0+p1									3+p0 / p1+2	p0+2 / 3+p1					p0+3 / 2+p1	2+p0 / p1+3
1 0 3 2 / 0 1 2 3 / 2 3 1 0 / 3 2 0 1	#168	Quasigroup Right Identity	x / 1+p0 / p1+1	x / p0+1 / 1+p1					p0+0 / 0+p1	0+p0 / p1+0									2+p0 / p1+3	p0+3 / 2+p1					p0+2 / 3+p1	3+p0 / p1+2
1 0 3 2 / 0 1 2 3 / 3 2 1 0 / 2 3 0 1	#169	Quasigroup Right Identity	x / 1+p0 / p1+1	x / p0+1 / 1+p1					p0+0 / 0+p1	0+p0 / p1+0									p0+3 / 2+p1	2+p0 / p1+3					3+p0 / p1+2	p0+2 / 3+p1
0 1 2 3 / 1 3 0 2 / 2 0 3 1 / 3 2 1 0	#6	Abelian	x / 0+p0 / p0+0	x / 0+p2 / p2+0					1+p2 / p2+2			1+p0 / p0+1			2+p0 / p0+2				2+p2 / p2+2						3+p2 / p2+3	3+p0 / p0+3
3 2 1 0 / 2 0 3 1 / 0 3 1 2 / 1 2 0 3	#569	Abelian	x / 3+p0 / p0+3	x / 3+p2 / p2+3					2+p2 / p2+2			2+p0 / p0+2			1+p0 / p0+1				1+p2 / p2+1						0+p2 / p2+0	0+p0 / p0+0
0 1 2 3 / 2 0 3 1 / 1 3 0 2 / 3 2 1 0	#8	Quasigroup Right Identity	x / 0+p0 / p2+0	x / p0+0 / 0+p2					p0+1 / 1+p2			2+p0 / p2+2			1+p0 / p2+1				p0+2 / 3+p2						p0+3 / 3+p2	3+p0 / p2+3
0 1 2 3 / 2 0 3 1 / 3 2 1 0 / 1 3 0 2	#10	Quasigroup Right Identity	x / 0+p0 / p2+0	x / p0+0 / 0+p2					2+p0 / p2+2			p0+1 / 1+p2			p0+2 / 2+p2				1+p0 / p2+1						p0+3 / 3+p2	3+p0 / p2+3
0 2 1 3 / 2 3 0 1 / 1 0 3 2 / 3 1 2 0	#48	Quasigroup Left Identity	x / p0+0 / 0+p2	x / 0+p0 / p2+0					1+p0 / p2+1			p0+2 / 2+p2			p0+1 / 1+p2				2+p0 / p2+2						3+p0 / p2+3	p0+3 / 3+p2
0 2 1 3 / 1 3 0 2 / 2 0 3 1 / 3 1 2 0	#50	Quasigroup Left Identity	x / p0+0 / 0+p2	x / 0+p0 / p2+0					p0+2 / 2+p2			1+p0 / p2+1			2+p0 / p2+2				p0+1 / 1+p2						3+p0 / p2+3	p0+3 / 3+p2
0 2 1 3 / 2 0 3 1 / 1 3 0 2 / 3 1 2 0	#56	Quasigroup Commutative	x / 0+p2 / p2+0	x / 0+p0 / p0+0					2+p2 / p2+2			2+p0 / p0+2			1+p0 / p0+1				1+p2 / p2+1						3+p0 / p0+3	3+p2 / p2+3

5

Table (page 6). Columns p_0–p_{23}. Each data cell shows two stacked expressions of the form $a+p_b$ over p_c+d. Cells shaded green are marked with an "x"; blue cells in the lower block are also marked "x".

grid	#	property	p_0	p_1	p_2	p_3	p_4	p_5	p_6	p_7	p_8	p_9	p_{10}	p_{11}	p_{12}	p_{13}	p_{14}	p_{15}	p_{16}	p_{17}	p_{18}	p_{19}	p_{20}	p_{21}	p_{22}	p_{23}
0213 2301 1032 3120	62	Quasigroup / Commutative	x $0+p_3$ p_2+0		x $0+p_0$ p_0+0					$2+p_0$ p_0+2			$2+p_2$ p_2+2			$1+p_2$ p_2+1			$1+p_0$ p_0+1					$3+p_0$ p_0+3		$3+p_2$ p_2+3
3120 1032 2301 0213	513	Quasigroup / Commutative	x $3+p_2$ p_2+3		x $3+p_0$ p_0+3					$1+p_0$ p_0+1			$1+p_2$ p_2+1			$2+p_2$ p_2+2			$2+p_0$ p_0+2					$0+p_0$ p_0+0		$0+p_2$ p_2+0
3120 1302 2031 0213	519	Quasigroup / Commutative	x $3+p_2$ p_2+3		x $3+p_0$ p_0+3					$1+p_2$ p_2+1			$1+p_0$ p_0+1			$2+p_0$ p_0+2			$2+p_2$ p_2+2					$0+p_0$ p_0+0		$0+p_2$ p_2+0
3120 2031 1302 0213	525	Quasigroup / Left Identity	x p_0+3 $3+p_2$		x $3+p_0$ p_2+3					p_0+1 $2+p_2$			$2+p_0$ p_2+1			$1+p_0$ p_2+2			p_0+2 $1+p_2$					$0+p_0$ p_2+0		p_0+0 $0+p_2$
3120 2301 1032 0213	527	Quasigroup / Left Identity	x p_0+3 $3+p_2$		x $3+p_0$ p_2+3					$2+p_0$ p_0+2			p_0+1 $2+p_2$			p_0+2 $1+p_2$			$1+p_0$ p_2+2					$0+p_0$ p_2+0		p_0+0 $0+p_2$
3210 1032 2301 0123	565	Quasigroup / Right Identity	x $3+p_0$ p_2+3		x p_0+3 $3+p_2$					$1+p_0$ p_2+2			p_0+2 $1+p_2$			p_0+1 $2+p_2$			$2+p_0$ p_2+1					p_0+0 $0+p_2$		$0+p_0$ p_2+0
3210 1302 2031 0123	567	Quasigroup / Right Identity	x $3+p_0$ p_2+3		x p_0+3 $3+p_2$					p_0+2 $1+p_2$			$1+p_0$ p_2+2			$2+p_0$ p_2+1			p_0+1 $2+p_2$					p_0+0 $0+p_2$		$0+p_0$ p_2+0
0123 2301 3210 1032	13	Quasigroup / Right Identity	x $0+p_0$ p_4+0			x p_0+0 $0+p_3$	x p_3+0 $0+p_4$			$3+p_0$ p_4+1		p_3+1 $3+p_4$		p_0+1 $3+p_4$	p_0+2 $1+p_4$			p_3+2 $2+p_4$	$1+p_0$ p_4+2			p_3+3 $2+p_4$	p_0+3 $2+p_3$			$2+p_0$ p_4+3
0123 3210 1032 2301	20	Quasigroup / Right Identity	x $0+p_0$ p_3+0			x $0+p_3$ p_4+0	x p_0+0 $0+p_4$			$2+p_0$ p_3+1		p_0+1 $2+p_4$		$2+p_3$ p_4+1	$3+p_3$ p_4+2			p_0+2 $3+p_4$	$3+p_0$ p_4+2			p_0+3 $1+p_4$	$1+p_3$ p_4+3			$1+p_0$ p_3+3
0231 1320 2013 3102	76	Quasigroup / Left Identity	x p_0+0 $0+p_4$			x $0+p_3$ p_3+0	x $0+p_0$ p_4+0			p_0+3 $1+p_4$		$1+p_3$ p_4+3		$1+p_0$ p_3+3	$2+p_0$ p_3+1			$2+p_3$ p_4+1	p_0+1 $2+p_4$			$3+p_3$ p_4+2	$3+p_0$ p_3+2			p_0+2 $3+p_4$
0231 2013 3102 1320	82	Quasigroup / Commutative	x $0+p_0$ p_4+0			x $0+p_0$ p_3+0	x $0+p_3$ p_3+0			$3+p_4$ p_4+3		$3+p_3$ p_3+3		$3+p_0$ p_0+3	$1+p_0$ p_0+1			$1+p_3$ p_3+1	$2+p_4$ p_4+1			$2+p_3$ p_3+2	$2+p_0$ p_0+2			$2+p_4$ p_4+2
0312 1203 2130 3021	99	Quasigroup / Left Identity	x p_0+0 $0+p_3$			x p_3+0 $0+p_4$	x $0+p_0$ p_4+0			p_0+2 $1+p_3$		$1+p_0$ $2+p_4$		p_3+2 $1+p_4$	p_3+3 $2+p_3$			$2+p_0$ p_4+3	p_0+3 $2+p_3$			$3+p_0$ p_4+1	p_3+1 $3+p_4$			p_0+1 $3+p_3$
0312 3021 1203 2130	112	Quasigroup / Commutative	x $0+p_3$ p_3+0			x $0+p_0$ p_4+0	x $0+p_0$ p_3+0			$2+p_0$ p_3+2		$2+p_0$ p_0+2		$2+p_4$ p_4+2	$3+p_4$ p_4+3			$3+p_0$ p_0+3	$1+p_0$ p_3+3			$1+p_0$ p_0+1	$1+p_4$ p_4+1			$1+p_3$ p_3+1
0123 1230 2301 3012	4	Abelian	x $0+p_0$ p_0+0					x $0+p_5$ p_5+0		$1+p_0$ p_5+1		$1+p_0$ p_0+1				$2+p_0$ p_5+2			$2+p_0$ p_0+2		$3+p_0$ p_0+3					$3+p_5$ p_5+3
2301 3012 0123 1230	400	Abelian	x $2+p_0$ p_0+2					x $2+p_5$ p_5+3		$3+p_5$ p_5+3		$3+p_0$ p_0+3				$0+p_5$ p_5+0			$0+p_0$ p_0+0		$1+p_0$ p_0+1					$1+p_5$ p_5+1
0123 2301 1230	17	Quasigroup / Right Identity	x $0+p_0$ p_5+0					x p_0+0 $0+p_5$		p_0+1 $3+p_5$		$3+p_0$ p_5+1				p_0+2 $2+p_5$			$2+p_0$ p_5+2		$1+p_0$ p_5+3					p_0+3 $1+p_5$
0123 3210 2301 1032	23	Quasigroup / Right Identity	x $0+p_0$ p_5+0					x p_0+0 $0+p_5$		$3+p_0$ p_5+1		p_0+1 $3+p_5$				p_0+2 $2+p_5$			$2+p_0$ p_5+2		p_0+3 $1+p_5$					$1+p_0$ p_5+3
0321 1032 2103 3210	120	Quasigroup / Left Identity	x p_0+0 $0+p_5$					x $0+p_0$ p_5+0		$1+p_0$ p_5+1		p_0+3 $1+p_5$				$2+p_0$ p_5+2			p_0+2 $2+p_5$		p_0+1 $3+p_5$					$3+p_0$ p_5+1
0321 1230 2103 3012	125	Quasigroup / Left Identity	x p_0+0 $0+p_5$					x $0+p_0$ p_5+0		p_0+3 $1+p_5$		$1+p_0$ p_5+1				$2+p_0$ p_5+2			p_0+2 $2+p_5$		$3+p_0$ p_5+1					p_0+1 $3+p_5$
0321 3012 2103 1230	138	Quasigroup / Commutative	x $0+p_5$ p_5+0					x $0+p_0$ p_0+0		$3+p_0$ p_5+3		$3+p_0$ p_0+3				$2+p_0$ p_0+2			$2+p_5$ p_5+2		$1+p_0$ p_0+1					$1+p_5$ p_5+1
0321 3210 2103 1032	143	Quasigroup / Commutative	x $0+p_5$ p_5+0					x $0+p_0$ p_0+0		$3+p_0$ p_0+3		$3+p_5$ p_5+3				$2+p_0$ p_0+2			$2+p_5$ p_5+2		$1+p_5$ p_5+1					$1+p_0$ p_0+1
2103 1032 0321 3210	344	Quasigroup / Commutative	x $2+p_0$ p_5+2					x $2+p_0$ p_0+2		$1+p_0$ p_0+1		$1+p_5$ p_5+1				$0+p_0$ p_0+0			$0+p_5$ p_5+0		$3+p_5$ p_5+3					$3+p_0$ p_0+3
2103 1230 0321 3012	347	Quasigroup / Commutative	x $2+p_0$ p_5+2					x $2+p_0$ p_0+2		$1+p_5$ p_5+1		$1+p_0$ p_0+1				$0+p_0$ p_0+0			$0+p_5$ p_5+0		$3+p_5$ p_5+3					$3+p_5$ p_5+3
2103 3012 0321 1230	353	Quasigroup / Left Identity	x p_0+2 $2+p_5$					x $2+p_0$ p_5+2		p_0+1 $3+p_5$		$3+p_0$ p_5+1				$0+p_0$ p_5+0			p_0+0 $0+p_5$		$1+p_0$ p_5+3					p_0+3 $1+p_5$
2103 3210 0321 1032	358	Quasigroup / Left Identity	x p_0+2 $2+p_5$					x $2+p_0$ p_5+2		$3+p_0$ p_5+1		p_0+1 $3+p_5$				$0+p_0$ p_5+0			p_0+0 $0+p_5$		p_0+3 $1+p_5$					$1+p_0$ p_5+3
2301 1032 0123 3210	394	Quasigroup / Right Identity	x $2+p_0$ p_5+2					x p_0+2 $2+p_5$		$1+p_0$ p_5+3		p_0+3 $1+p_5$				p_0+0 $0+p_5$			$0+p_0$ p_5+0		p_0+1 $3+p_5$					$3+p_0$ p_5+1
2301 1230 0123 3012	398	Quasigroup / Right Identity	x $2+p_0$ p_5+2					x p_0+2 $2+p_5$		p_0+3 $1+p_5$		$1+p_0$ p_5+3				p_0+0 $0+p_5$			$0+p_0$ p_5+0		p_0+1 $3+p_5$					p_0+1 $3+p_5$
0123 1032 2301 3210	0	Abelian	x $0+p_0$ p_0+0	x $0+p_1$ p_1+0	x $0+p_2$ p_2+0	x $0+p_3$ p_3+0	x $0+p_4$ p_4+0	x $0+p_5$ p_5+0	$1+p_1$ p_1+1	$1+p_0$ p_0+1	$1+p_4$ p_4+1	$1+p_5$ p_5+1	$1+p_2$ p_2+1	$1+p_3$ p_3+1	$2+p_3$ p_3+2	$2+p_2$ p_2+2	$2+p_5$ p_5+2	$2+p_4$ p_4+2	$2+p_0$ p_0+2	$2+p_1$ p_1+2	$3+p_5$ p_5+3	$3+p_4$ p_4+3	$3+p_3$ p_3+3	$3+p_2$ p_2+3	$3+p_1$ p_1+3	$3+p_0$ p_0+3
2310 3001 1032 0123	431	Abelian	x $3+p_0$ p_0+3	x $2+p_6$ p_6+2					x $3+p_6$ p_6+3	$2+p_0$ p_0+2									$1+p_6$ p_6+1	$0+p_0$ p_0+0				$1+p_0$ p_0+1		$0+p_6$ p_6+0
2301 2310 0123 1032	548	Abelian	x $2+p_0$ p_6+2	x $3+p_6$ p_6+3					x $2+p_0$ p_6+2	$3+p_0$ p_0+3									$0+p_6$ p_6+0	$1+p_0$ p_0+1				$0+p_0$ p_0+0		$1+p_6$ p_6+1
2310 3201 0132 1023	405	Quasigroup / Commutative	x $3+p_6$ p_6+3	x $2+p_0$ p_0+2					x $3+p_0$ p_6+3	$2+p_6$ p_6+2									$0+p_6$ p_6+0	$1+p_0$ p_0+1				$0+p_6$ p_6+0		$1+p_0$ p_0+1
2301 3210 1023 0132	406	Quasigroup / Left Identity	x p_0+2 $2+p_6$	x $3+p_0$ p_6+3					x $2+p_0$ p_6+2	p_0+3 $3+p_6$									$0+p_6$ p_6+1	p_0+0 $1+p_6$				p_0+1 $0+p_6$		$1+p_0$ p_6+0
2301 3210 1032 0123	407	Quasigroup / Right Identity	x $3+p_6$ p_6+3	x p_0+2 $2+p_6$					x p_0+3 $3+p_6$	$2+p_0$ p_6+2									$0+p_6$ p_6+1	p_0+0 $1+p_6$				p_0+1 $0+p_6$		$1+p_0$ p_6+0
2310 0123 3201 1032	428	Quasigroup / Right Identity	x $2+p_0$ p_6+2	x p_0+3 $3+p_6$					x p_0+2 $3+p_6$	$3+p_0$ p_6+3									p_0+0 $1+p_6$	$0+p_0$ p_6+1				$1+p_0$ p_6+0		$0+p_6$ p_6+1
2310 3201 0132 1023	429	Quasigroup / Left Identity	x p_0+3 $3+p_6$	x $2+p_0$ p_6+2					x $3+p_0$ p_0+2	p_0+2 $2+p_6$									p_0+0 $1+p_6$	$0+p_0$ p_6+1				$1+p_0$ p_6+0		p_0+1 $0+p_6$
2310 3201 1023 0132	430	Quasigroup / Commutative	x $2+p_8$ p_6+2	x $3+p_0$ p_0+3					x $2+p_0$ p_0+2	$3+p_6$ p_6+3									$1+p_6$ p_6+1	$0+p_0$ p_6+0				$1+p_0$ p_6+0		$0+p_6$ p_6+0
2310 0132 1023	549	Quasigroup / Commutative	x $3+p_6$ p_6+3	x $2+p_0$ p_6+2					x $3+p_6$ p_0+3	$2+p_0$ p_6+2									$0+p_6$ p_6+0	$1+p_0$ p_0+1				$0+p_0$ p_0+0		$1+p_6$ p_6+1
3201 2310 1023 0132	550	Quasigroup / Left Identity	x p_0+2 $2+p_6$	x $3+p_0$ p_6+3					x $2+p_0$ p_6+2	p_0+3 $3+p_6$									p_0+1 $0+p_6$	$1+p_0$ p_6+0				$0+p_0$ p_6+1		$1+p_6$ p_6+1
3201 2310 1032 0123	551	Quasigroup / Right Identity	x $3+p_6$ p_6+3	x p_0+2 $2+p_6$					x p_0+3 $3+p_6$	$2+p_0$ p_6+2									p_0+1 $0+p_6$	$1+p_0$ p_6+0				$0+p_0$ p_6+1		$0+p_0$ p_6+0
3210 2301 0123 1032	572	Quasigroup / Right Identity	x $2+p_0$ p_6+2	x p_0+3 $3+p_6$					x p_0+2 $2+p_6$	$3+p_0$ p_6+3									$1+p_6$ p_6+0	p_0+1 $0+p_6$				p_0+0 $1+p_6$		$0+p_0$ p_6+1
3210 0132 1023	573	Quasigroup / Left Identity	x p_0+3 $3+p_6$	x $2+p_0$ p_6+2					x $3+p_0$ p_6+3	p_0+2 $2+p_6$									$1+p_0$ p_6+0	p_0+1 $0+p_6$				p_0+0 $1+p_6$		$0+p_0$ p_6+1
3210 2301 1023 0132	574	Quasigroup / Commutative	x $2+p_0$ p_0+2	x $3+p_0$ p_0+3					x $2+p_0$ p_0+2	$1+p_6$ p_6+1									$1+p_0$ p_6+1	$0+p_6$ p_6+0				$1+p_6$ p_6+1		$0+p_0$ p_0+0
0213 3120 1302 2031	69	Quasigroup	x (blue)		$0+p_0$ $3+p_7$		p_0+0 p_7+3		x (blue)		p_0+2 p_7+1		$2+p_0$ $1+p_7$			$3+p_0$ $0+p_7$		p_0+1 p_7+2				p_0+3 p_7+0		$1+p_0$ $2+p_7$		
0213 3120 2031 1302	70	Quasigroup	x (blue)		$0+p_0$ $2+p_7$		p_0+0 p_7+3		x (blue)		p_0+2 p_7+1		$3+p_0$ $1+p_7$			$2+p_0$ $0+p_7$	p_0+1 p_7+2				p_0+3 p_7+0			$1+p_0$ $3+p_7$		
0231 3102 2013 1320	92	Quasigroup	x (blue)		$0+p_0$ $2+p_7$		p_0+0 p_7+2		x (blue)		p_0+3 p_7+1		$3+p_0$ $1+p_7$	$2+p_0$ $0+p_7$		p_0+1 p_7+3					p_0+2 p_7+0		$1+p_0$ $3+p_7$			
0312 2130 1203 3021	109	Quasigroup	x (blue)		p_0+0 p_7+3		$0+p_0$ $3+p_7$		x (blue)	$2+p_0$ $1+p_7$		p_0+2 $1+p_7$		p_0+3 p_7+0	$1+p_0$ $2+p_7$				$3+p_0$ p_7+0		p_0+1 p_7+2					
0321 2130 1230 3012	131	Quasigroup	x (blue)		p_0+0 p_7+2		$0+p_0$ $3+p_7$		x (blue)		$2+p_0$ $1+p_7$	p_0+3 p_7+1		p_0+2 p_7+0	$1+p_0$ $2+p_7$				$3+p_0$ p_7+0		p_0+1 p_7+3					
0321 2130 3012 1230	132	Quasigroup	x (blue)		p_0+0 p_7+2		$0+p_0$ $2+p_7$		x (blue)		$3+p_0$ $1+p_7$	p_0+3 p_7+1	p_0+1 p_7+0		$1+p_0$ $3+p_7$				$2+p_0$ $0+p_7$		p_0+1 p_7+3					
1203 3021 0312 2130	211	Quasigroup	x (blue)		p_0+2 p_7+1		$2+p_0$ $1+p_7$		x (blue)	$0+p_0$ $3+p_7$		p_0+0 p_7+3		p_0+1 p_7+2		$3+p_0$ $0+p_7$				$1+p_0$ $2+p_7$		p_0+3 p_7+0				
1230 3012 0321 2103	233	Quasigroup	x (blue)		p_0+3 p_7+1		$2+p_0$ $1+p_7$		x (blue)		$0+p_0$ $3+p_7$	p_0+0 p_7+2	p_0+1 p_7+3	$3+p_0$ $0+p_7$					$1+p_0$ $2+p_7$		p_0+2 p_7+0					
1230 2103 0321	234	Quasigroup	x (blue)		p_0+3 p_7+1		$3+p_0$ $1+p_7$		x (blue)		$0+p_0$ $2+p_7$	p_0+0 p_7+2	p_0+1 p_7+3	$2+p_0$ $0+p_7$					$1+p_0$ $3+p_7$		p_0+2 p_7+0					
1302 2031 0213 3120	251	Quasigroup	x (blue)		$2+p_0$ $1+p_7$		p_0+2 p_7+1		x (blue)	p_0+0 $3+p_7$		$0+p_0$ $3+p_7$	$1+p_0$ $2+p_7$		p_0+3 p_7+0				p_0+1 p_7+2		$3+p_0$ $0+p_7$					
1302 2031 3120 0213	252	Quasigroup	x (blue)		$3+p_0$ $1+p_7$		p_0+2 p_7+1		x (blue)		p_0+0 $3+p_7$	$0+p_0$ $2+p_7$	$1+p_0$ $3+p_7$	p_0+3 p_7+0					p_0+1 p_7+2		$2+p_0$ $0+p_7$					
1320 2013 3102 0231	274	Quasigroup	x (blue)			$3+p_0$ $1+p_7$	p_0+2 p_7+1		x (blue)		p_0+0 p_7+2	$0+p_0$ $3+p_7$	$1+p_0$ $2+p_7$		p_0+0 p_7+0				$3+p_0$ p_7+1		$2+p_0$ $0+p_7$					
1320 2013 0231 3102	301	Quasigroup	x (blue)			$2+p_0$ $0+p_7$	p_0+0 p_7+3		x (blue)		p_0+2 p_7+0		p_0+0 p_7+2	$3+p_0$ $2+p_7$					$3+p_0$ p_7+1		p_0+3 p_7+1		$1+p_0$ p_7+0			
2031 1302 0213 3120	323	Quasigroup	x (blue)		$2+p_0$ $0+p_7$		p_0+1 p_7+2		x (blue)		p_0+3 p_7+0	$1+p_0$ $3+p_7$		$0+p_0$ $2+p_7$	p_0+0 p_7+1				p_0+2 p_7+1			$3+p_0$ $1+p_7$				
2031 1302 3120 0213	324	Quasigroup	x (blue)		$3+p_0$ $0+p_7$		p_0+1 p_7+2		x (blue)	p_0+3 p_7+0		$1+p_0$ $2+p_7$	$0+p_0$ p_7+3		p_0+0 $3+p_7$				p_0+2 p_7+1			$2+p_0$ $1+p_7$				
2103 0321 1230 3012	341	Quasigroup	x (blue)		p_0+2 p_7+0		$1+p_0$ $3+p_7$		x (blue)	$2+p_0$ $0+p_7$		p_0+1 p_7+3	p_0+0 p_7+2		$0+p_0$ $2+p_7$				$3+p_0$ $1+p_7$		p_0+3 p_7+1					
2103 0321 3012 1230	342	Quasigroup	x (blue)		p_0+2 p_7+0		$1+p_0$ $2+p_7$		x (blue)	$3+p_0$ $0+p_7$		p_0+1 p_7+3	p_0+0 $0+p_7$	$0+p_0$ p_7+3		p_7+2 p_7+2				$2+p_0$ $1+p_7$		p_0+3 p_7+1				

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This page contains a large, dense data table (columns P0 through P23) whose cells hold quasigroup/group construction expressions. The identifying columns (permutation, index number, and algebraic type) are transcribed below.

Permutation	#	Type	P0–P23 data
2130 / 0312 / 3021 / 1203	#364	Quasigroup	(see table)
3012 / 1230 / 0321 / 2103	#443	Quasigroup	
3012 / 1230 / 2103 / 0321	#444	Quasigroup	
3021 / 1203 / 2130 / 0312	#466	Quasigroup	
3102 / 0231 / 1320 / 2013	#483	Quasigroup	
3120 / 0213 / 1302 / 2031	#505	Quasigroup	
3120 / 0213 / 2031 / 1302	#506	Quasigroup	
1032 / 3210 / 2301 / 0123	#191	Quasigroup / Right Identity	
1320 / 0231 / 3102 / 2013	#271	Quasigroup / Left Identity	
2130 / 3021 / 0312 / 1203	#379	Quasigroup / Left Identity	
2301 / 1032 / 3210 / 0123	#397	Quasigroup / Right Identity	
3021 / 0312 / 2130 / 1203	#463	Quasigroup / Commutative	
3102 / 1320 / 0231 / 2013	#493	Quasigroup / Commutative	
1230 / 2301 / 3012 / 0123	#231	Abelian	
3012 / 0123 / 1230 / 2301	#432	Abelian	
1032 / 0321 / 3210 / 2103	#175	Quasigroup / Commutative	
1032 / 2103 / 3210 / 0321	#177	Quasigroup / Left Identity	
1032 / 2301 / 3210 / 0123	#181	Quasigroup / Right Identity	
1230 / 0123 / 3012 / 2301	#217	Quasigroup / Right Identity	
1230 / 0321 / 3012 / 2103	#222	Quasigroup / Left Identity	
1230 / 2103 / 3012 / 0321	#228	Quasigroup / Commutative	
3012 / 0123 / 1230 / 2103	#437	Quasigroup / Commutative	
3012 / 2103 / 1230 / 0321	#450	Quasigroup / Left Identity	
3012 / 2301 / 1230 / 0123	#455	Quasigroup / Right Identity	
3210 / 0123 / 1032 / 2301	#552	Quasigroup / Right Identity	
3210 / 0321 / 1032 / 2103	#558	Quasigroup / Left Identity	
3210 / 2103 / 1032 / 0321	#571	Quasigroup / Commutative	
3210 / 2301 / 1032 / 0123	#575	Abelian	
0132 / 2310 / 1023 / 3201	#36	Quasigroup	
0132 / 3201 / 1023 / 2310	#42	Quasigroup	
0213 / 1302 / 3120 / 2031	#53	Quasigroup	
0213 / 2031 / 3120 / 1302	#59	Quasigroup	
0231 / 2013 / 1320 / 3102	#81	Quasigroup	
0312 / 1203 / 3021 / 2130	#100	Quasigroup	
1023 / 2310 / 0132 / 3201	#156	Quasigroup	
1023 / 3201 / 0132 / 2310	#162	Quasigroup	
1203 / 0312 / 2130 / 3021	#195	Quasigroup	
1302 / 0213 / 2031 / 3120	#242	Quasigroup	
1302 / 2031 / 0213 / 3120	#261	Quasigroup	
1320 / 0231 / 3102 / 2013	#283	Quasigroup	
2013 / 0231 / 3102 / 1320	#292	Quasigroup	
2031 / 1302 / 0213 / 3120	#314	Quasigroup	
2031 / 3120 / 1302 / 0213	#333	Quasigroup	
2130 / 3021 / 1203 / 0312	#380	Quasigroup	
0132 / 3201 / 1023 / 2310	#413	Quasigroup	
2310 / 1023 / 3201 / 0132	#419	Quasigroup	
3021 / 2130 / 0312 / 1203	#475	Quasigroup	
3102 / 1320 / 2013 / 0231	#494	Quasigroup	
3120 / 1302 / 0213 / 2031	#516	Quasigroup	
3120 / 2031 / 0213 / 1302	#522	Quasigroup	
3201 / 0132 / 2310 / 1023	#533	Quasigroup	
3201 / 1023 / 2310 / 0132	#539	Quasigroup	
1032 / 2301 / 0123 / 3210	#178	Quasigroup / Right Identity	
1203 / 0312 / 3021 / 2130	#196	Quasigroup / Left Identity	
2013 / 0231 / 1320 / 3102	#291	Quasigroup / Commutative	
2130 / 1203 / 3021 / 0312	#373	Quasigroup / Commutative	
3102 / 0013 / 1320 / 0231	#499	Quasigroup / Left Identity	
3210 / 1032 / 0123 / 2301	#562	Quasigroup / Right Identity	
1203 / 2130 / 0312 / 3021	#202	Quasigroup / Commutative	

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			p_0	p_1	p_2	p_3	p_4	p_5	p_6	p_7	p_8	p_9	p_{10}	p_{11}	p_{12}	p_{13}	p_{14}	p_{15}	p_{16}	p_{17}	p_{18}	p_{19}	p_{20}	p_{21}	p_{22}	p_{23}
1 3 2 0 / 3 1 0 2 / 2 0 1 3 / 0 2 3 1	#284	Quasigroup / Commutative	$\frac{x}{1+p_{15}}$ $p_{15}+1$			$\frac{3+p_0}{p_0+3}$ $p_{20}+0$	$\frac{0+p_{20}}{}$			$\frac{2+p_{15}}{p_{15}+2}$	$\frac{3+p_{20}}{p_{20}+3}$			$\frac{0+p_0}{p_0+0}$	$\frac{2+p_2}{p_0+2}$			$\frac{x}{1+p_{20}}$ $p_{20}+1$	$\frac{0+p_{15}}{p_{15}+0}$			$\frac{2+p_{20}}{p_{20}+2}$	$\frac{1+p_{15}}{p_{15}+1}$			$\frac{3+p_{15}}{p_{15}+3}$
2 0 1 3 / 3 1 0 2 / 0 2 3 1 / 1 3 2 0	#304	Quasigroup / Left Identity	$\frac{x}{p_0+1}$ $1+p_{15}$			$\frac{2+p_0}{p_{20}+3}$	$\frac{p_{15}+0}{3+p_{20}}$			$\frac{p_{15}+0}{0+p_{15}}$	$\frac{p_{15}+3}{2+p_{20}}$			$\frac{3+p_0}{p_{20}+0}$	$\frac{0+p_0}{p_0+0}$			$\frac{x}{p_{15}+1}$ $1+p_{20}$	$\frac{p_0+0}{3+p_{15}}$			$\frac{p_{15}+2}{0+p_{20}}$	$\frac{1+p_{20}}{p_{20}+1}$			$\frac{p_0+3}{2+p_{15}}$
2 3 0 1 / 0 1 2 3 / 1 0 3 2 / 3 2 1 0	#384	Quasigroup / Right Identity	$\frac{x}{1+p_0}$ $p_{15}+1$			$\frac{p_0+2}{3+p_{20}}$	$\frac{0+p_{15}}{p_{20}+3}$			$\frac{2+p_0}{p_{15}+0}$	$\frac{3+p_{15}}{p_{20}+2}$			$\frac{p_0+3}{0+p_{20}}$	$\frac{p_0+0}{2+p_{20}}$			$\frac{x}{1+p_{15}}$ $p_{20}+1$	$\frac{0+p_0}{p_{15}+3}$			$\frac{2+p_{15}}{p_{20}+0}$	$\frac{x}{p_0+1}$ $1+p_{20}$			$\frac{3+p_0}{p_{15}+2}$
3 0 2 1 / 2 1 3 0 / 1 2 0 3 / 0 3 1 2	#476	Quasigroup / Left Identity	$\frac{x}{p_0+1}$ $1+p_{20}$			$\frac{2+p_{15}}{p_{20}+0}$	$\frac{3+p_0}{p_{15}+2}$			$\frac{2+p_{15}}{0+p_{20}}$	$\frac{2+p_0}{p_{15}+0}$			$\frac{3+p_{15}}{p_{20}+2}$	$\frac{p_0+0}{p_{20}+3}$			$\frac{x}{1+p_0}$ $p_{15}+1$	$\frac{0+p_0}{3+p_{20}}$			$\frac{0+p_0}{p_{15}+3}$	$\frac{p_0+1}{p_{20}+1}$			$\frac{p_0+0}{2+p_{20}}$
3 2 1 0 / 1 0 3 2 / 2 3 0 1 / 1 0 3 2	#555	Quasigroup / Right Identity	$\frac{x}{1+p_0}$ $p_{20}+1$			$\frac{p_{15}+2}{0+p_{20}}$	$\frac{p_0+3}{2+p_{15}}$			$\frac{3+p_0}{p_{20}+0}$	$\frac{p_0+2}{0+p_{15}}$			$\frac{p_{15}+3}{2+p_{20}}$	$\frac{p_{15}+0}{3+p_{20}}$			$\frac{x}{p_0+1}$ $1+p_{15}$	$\frac{2+p_0}{p_{20}+3}$			$\frac{p_0+0}{3+p_{15}}$	$\frac{p_{15}+1}{1+p_{20}}$			$\frac{0+p_0}{p_{20}+2}$
1 3 0 2 / 3 2 1 0 / 0 1 2 3 / 2 0 3 1	#262	Abelian	$\frac{x}{2+p_0}$ p_0+2	$\frac{1+p_{21}}{p_{21}+1}$						$\frac{3+p_{21}}{p_{21}+3}$			$\frac{0+p_0}{p_0+0}$			$\frac{3+p_0}{p_0+3}$			$\frac{0+p_{21}}{p_{21}+0}$					$\frac{x}{2+p_{21}}$ $p_{21}+2$		$\frac{1+p_0}{p_0+1}$
2 0 3 1 / 0 1 2 3 / 3 2 1 0 / 1 3 0 2	#313	Abelian	$\frac{x}{1+p_0}$ p_0+1	$\frac{2+p_{21}}{p_{21}+2}$						$\frac{0+p_{21}}{p_{21}+0}$			$\frac{3+p_0}{p_0+3}$			$\frac{0+p_0}{p_0+0}$			$\frac{3+p_{21}}{p_{21}+3}$					$\frac{x}{1+p_{21}}$ $p_{21}+1$		$\frac{2+p_0}{p_0+2}$
1 0 3 2 / 0 2 1 3 / 3 1 2 0 / 2 3 0 1	#173	Quasigroup / Commutative	$\frac{x}{2+p_{21}}$ $p_{21}+2$	$\frac{1+p_0}{p_0+1}$						$\frac{0+p_0}{p_0+0}$			$\frac{3+p_{21}}{p_{21}+3}$			$\frac{0+p_{21}}{p_{21}+0}$			$\frac{3+p_0}{p_0+3}$					$\frac{x}{2+p_0}$ p_0+2		$\frac{1+p_{21}}{p_{21}+1}$
1 0 3 2 / 3 1 2 0 / 0 2 1 3 / 2 3 0 1	#184	Quasigroup / Left Identity	$\frac{x}{p_0+1}$ $1+p_{21}$	$\frac{2+p_0}{p_{21}+2}$						$\frac{0+p_0}{p_{21}+3}$			$\frac{p_0+0}{3+p_{21}}$			$\frac{p_0+3}{0+p_{21}}$			$\frac{3+p_0}{p_{21}+0}$					$\frac{x}{1+p_0}$ $p_{21}+1$		$\frac{p_0+2}{2+p_{21}}$
1 0 3 2 / 3 2 1 0 / 0 1 2 3 / 2 3 0 1	#188	Quasigroup / Right Identity	$\frac{x}{2+p_0}$ $p_{21}+2$	$\frac{p_0+1}{1+p_{21}}$						$\frac{0+p_0}{p_{21}+3}$			$\frac{p_0+0}{3+p_{21}}$			$\frac{p_0+3}{0+p_{21}}$			$\frac{3+p_0}{p_{21}+0}$					$\frac{x}{p_0+2}$ $2+p_{21}$		$\frac{1+p_0}{p_{21}+1}$
1 3 0 2 / 0 1 2 3 / 3 2 1 0 / 2 0 3 1	#241	Quasigroup / Right Identity	$\frac{x}{1+p_0}$ $p_{21}+1$	$\frac{p_0+2}{2+p_{21}}$						$\frac{p_0+0}{3+p_{21}}$			$\frac{0+p_0}{p_{21}+3}$			$\frac{3+p_0}{p_{21}+0}$			$\frac{p_0+3}{0+p_{21}}$					$\frac{x}{p_0+1}$ $1+p_{21}$		$\frac{2+p_0}{p_{21}+2}$
1 3 0 2 / 0 2 1 3 / 3 1 2 0 / 2 0 3 1	#245	Quasigroup / Left Identity	$\frac{x}{p_0+2}$ $2+p_{21}$	$\frac{1+p_0}{p_{21}+0}$						$\frac{p_0+0}{3+p_{21}}$			$\frac{0+p_0}{p_{21}+3}$			$\frac{3+p_0}{p_{21}+0}$			$\frac{p_0+3}{0+p_{21}}$					$\frac{x}{2+p_0}$ $p_{21}+2$		$\frac{p_0+1}{1+p_{21}}$
1 3 0 2 / 0 2 1 3 / 3 1 2 0 / 2 0 3 1	#258	Quasigroup / Commutative	$\frac{x}{1+p_{21}}$ $p_{21}+1$	$\frac{2+p_0}{p_0+2}$						$\frac{3+p_{21}}{p_{21}+3}$			$\frac{0+p_0}{p_0+0}$			$\frac{3+p_0}{p_0+3}$			$\frac{0+p_{21}}{p_{21}+0}$					$\frac{x}{1+p_0}$ p_0+1		$\frac{2+p_{21}}{p_{21}+2}$
2 0 3 1 / 0 2 1 3 / 3 1 2 0 / 1 3 0 2	#317	Quasigroup / Commutative	$\frac{x}{2+p_{21}}$ $p_{21}+2$	$\frac{1+p_0}{p_0+1}$						$\frac{0+p_0}{p_{21}+0}$			$\frac{3+p_0}{p_0+3}$			$\frac{0+p_0}{p_0+0}$			$\frac{3+p_{21}}{p_{21}+3}$					$\frac{x}{2+p_0}$ p_0+2		$\frac{1+p_{21}}{p_{21}+1}$
2 0 3 1 / 3 1 2 0 / 0 2 1 3 / 1 3 0 2	#330	Quasigroup / Left Identity	$\frac{x}{p_0+1}$ $1+p_{21}$	$\frac{2+p_0}{p_{21}+2}$						$\frac{p_0+3}{0+p_{21}}$			$\frac{3+p_0}{p_{21}+0}$			$\frac{0+p_0}{p_{21}+3}$			$\frac{p_0+0}{3+p_{21}}$					$\frac{x}{1+p_0}$ $p_{21}+1$		$\frac{p_0+2}{2+p_{21}}$
2 0 3 1 / 3 2 1 0 / 0 1 2 3 / 1 3 0 2	#334	Quasigroup / Right Identity	$\frac{x}{2+p_0}$ $p_{21}+2$	$\frac{p_0+1}{1+p_{21}}$						$\frac{p_0+3}{0+p_{21}}$			$\frac{3+p_0}{p_{21}+0}$			$\frac{0+p_0}{p_{21}+3}$			$\frac{p_0+0}{3+p_{21}}$					$\frac{x}{p_0+2}$ $2+p_{21}$		$\frac{1+p_0}{p_{21}+1}$
2 3 0 1 / 0 1 2 3 / 3 2 1 0 / 1 0 3 2	#387	Quasigroup / Right Identity	$\frac{x}{1+p_0}$ $p_{21}+1$	$\frac{p_0+2}{2+p_{21}}$						$\frac{3+p_0}{p_{21}+0}$			$\frac{p_0+3}{0+p_{21}}$			$\frac{p_0+0}{3+p_{21}}$			$\frac{0+p_0}{p_{21}+3}$					$\frac{x}{p_0+1}$ $1+p_{21}$		$\frac{2+p_0}{p_{21}+2}$
2 3 0 1 / 0 2 1 3 / 3 1 2 0 / 1 0 3 2	#391	Quasigroup / Left Identity	$\frac{x}{p_0+2}$ $2+p_{21}$	$\frac{1+p_0}{p_{21}+1}$						$\frac{3+p_0}{p_{21}+0}$			$\frac{p_0+3}{0+p_{21}}$			$\frac{p_0+0}{3+p_{21}}$			$\frac{0+p_0}{p_{21}+3}$					$\frac{x}{2+p_0}$ $p_{21}+2$		$\frac{p_0+1}{1+p_{21}}$
2 3 0 1 / 0 2 1 3 / 3 1 2 0 / 1 0 3 2	#402	Quasigroup / Commutative	$\frac{x}{1+p_{21}}$ $p_{21}+1$	$\frac{2+p_0}{p_0+2}$						$\frac{3+p_0}{p_0+3}$			$\frac{0+p_{21}}{p_{21}+0}$			$\frac{3+p_{21}}{p_{21}+3}$			$\frac{0+p_0}{p_0+0}$					$\frac{x}{1+p_0}$ p_0+1		$\frac{2+p_{21}}{p_{21}+2}$
2 3 0 1 / 3 2 1 0 / 0 1 2 3 / 1 0 3 2	#404	Abelian	$\frac{x}{2+p_0}$ p_0+2	$\frac{3+p_6}{p_6+3}$	$\frac{1+p_{21}}{p_{21}+1}$	$\frac{3+p_{11}}{p_{11}+3}$	$\frac{1+p_{19}}{p_{19}+1}$	$\frac{x}{2+p_5}$ p_5+2	$\frac{x}{2+p_6}$ p_6+2	$\frac{3+p_0}{p_0+3}$	$\frac{0+p_{19}}{p_{19}+0}$	$\frac{3+p_5}{p_5+3}$	$\frac{0+p_{21}}{p_{21}+0}$	$\frac{x}{1+p_{11}}$ $p_{11}+2$	$\frac{1+p_{11}}{p_{11}+1}$	$\frac{3+p_{21}}{p_{21}+3}$	$\frac{0+p_5}{p_5+0}$	$\frac{3+p_{19}}{p_{19}+3}$	$\frac{0+p_0}{p_0+0}$	$\frac{1+p_6}{p_6+1}$	$\frac{1+p_5}{p_5+1}$	$\frac{x}{2+p_{19}}$ $p_{19}+2$	$\frac{0+p_{11}}{p_{11}+0}$	$\frac{x}{2+p_{21}}$ $p_{21}+2$	$\frac{0+p_6}{p_6+0}$	$\frac{1+p_0}{p_0+1}$
1 0 3 2 / 0 1 2 3 / 3 2 1 0 / 2 3 0 1	#171	Abelian	$\frac{x}{p_0+1}$ $1+p_1$	$\frac{1+p_0}{p_1+1}$	$\frac{2+p_{21}}{p_1+2}$	$\frac{2+p_{20}}{p_{20}+2}$	$\frac{3+p_{15}}{p_{15}+3}$	$\frac{3+p_{14}}{p_{14}+3}$	$\frac{0+p_1}{p_1+0}$	$\frac{0+p_0}{p_0+0}$	$\frac{2+p_{15}}{p_{15}+2}$	$\frac{2+p_{14}}{p_{14}+2}$	$\frac{3+p_{21}}{p_{21}+3}$	$\frac{3+p_{20}}{p_{20}+3}$	$\frac{0+p_{20}}{p_{20}+0}$	$\frac{0+p_{21}}{p_{21}+0}$	$\frac{x}{1+p_{14}}$ $p_{14}+1$	$\frac{1+p_{15}}{p_{15}+1}$	$\frac{3+p_0}{p_0+3}$	$\frac{3+p_1}{p_1+3}$	$\frac{0+p_{14}}{p_{14}+0}$	$\frac{0+p_{15}}{p_{15}+0}$	$\frac{1+p_{20}}{p_{20}+1}$	$\frac{x}{2+p_{21}}$ $p_{21}+1$	$\frac{2+p_1}{p_1+2}$	$\frac{2+p_0}{p_0+2}$
0 1 3 2 / 3 2 0 1 / 2 3 0 1 / 1 0 2 3	#39	Quasigroup	x	$\frac{0+p_0}{1+p_{23}}$		$\frac{p_0+0}{p_{23}+1}$				$\frac{3+p_0}{2+p_{23}}$				$\frac{p_0+1}{p_{23}+0}$	$\frac{p_0+3}{p_{23}+2}$							$\frac{1+p_0}{0+p_{23}}$		$\frac{p_0+2}{p_{23}+3}$		$\frac{2+p_0}{3+p_{23}}$	x
0 1 3 2 / 3 2 0 1 / 2 3 1 0 / 1 0 2 3	#45	Quasigroup	x	$\frac{0+p_0}{2+p_{23}}$			$\frac{p_0+0}{p_{23}+1}$	$\frac{3+p_0}{1+p_{23}}$			$\frac{p_0+1}{p_{23}+0}$							$\frac{p_0+3}{p_{23}+2}$				$\frac{2+p_0}{0+p_{23}}$	$\frac{p_0+2}{p_{23}+3}$			$\frac{1+p_0}{3+p_{23}}$	x
0 2 3 1 / 1 3 2 0 / 3 1 0 2 / 2 0 1 3	#79	Quasigroup	x	$\frac{p_0+0}{p_{23}+1}$		$\frac{0+p_0}{1+p_{23}}$				$\frac{p_0+3}{3+p_{23}}$				$\frac{1+p_0}{0+p_{23}}$	$\frac{3+p_0}{2+p_{23}}$							$\frac{p_0+1}{p_{23}+0}$		$\frac{2+p_0}{3+p_{23}}$		$\frac{p_0+2}{p_{23}+3}$	x
0 3 1 2 / 3 0 2 1 / 2 1 3 0 / 1 2 0 3	#115	Quasigroup	x				$\frac{0+p_0}{2+p_{23}}$	$\frac{p_0+0}{p_{23}+2}$			$\frac{3+p_0}{1+p_{23}}$	$\frac{p_0+2}{p_{23}+3}$						$\frac{p_0+3}{p_{23}+1}$	$\frac{2+p_0}{0+p_{23}}$				$\frac{p_0+1}{p_{23}+0}$	$\frac{1+p_0}{3+p_{23}}$			x
0 3 2 1 / 1 2 3 0 / 3 0 1 2 / 2 1 0 3	#126	Quasigroup	x	$\frac{p_0+0}{p_{23}+2}$			$\frac{0+p_0}{1+p_{23}}$	$\frac{p_0+3}{p_{23}+1}$			$\frac{1+p_0}{0+p_{23}}$							$\frac{3+p_0}{2+p_{23}}$			$\frac{p_0+2}{p_{23}+0}$	$\frac{2+p_0}{3+p_{23}}$			$\frac{p_0+1}{p_{23}+3}$		x
0 3 2 1 / 3 0 1 2 / 1 2 3 0 / 2 1 0 3	#137	Quasigroup	x				$\frac{p_0+0}{p_{23}+2}$	$\frac{0+p_0}{2+p_{23}}$			$\frac{p_0+3}{p_{23}+1}$	$\frac{2+p_0}{0+p_{23}}$						$\frac{3+p_0}{1+p_{23}}$	$\frac{p_0+2}{p_{23}+0}$				$\frac{p_0+1}{3+p_{23}}$	$\frac{p_0+1}{p_{23}+3}$			x
1 0 2 3 / 2 3 1 0 / 3 2 0 1 / 0 1 3 2	#159	Quasigroup	x	$\frac{3+p_0}{1+p_{23}}$			$\frac{p_0+1}{p_{23}+0}$	$\frac{0+p_0}{2+p_{23}}$			$\frac{p_0+0}{p_{23}+1}$							$\frac{p_0+2}{p_{23}+3}$			$\frac{1+p_0}{3+p_{23}}$	$\frac{p_0+3}{p_{23}+2}$			$\frac{2+p_0}{0+p_{23}}$		x
1 0 2 3 / 3 2 0 1 / 2 3 1 0 / 0 1 3 2	#165	Quasigroup	x	$\frac{3+p_0}{2+p_{23}}$		$\frac{p_0+1}{p_{23}+0}$				$\frac{0+p_0}{1+p_{23}}$				$\frac{p_0+0}{p_{23}+1}$	$\frac{p_0+2}{p_{23}+3}$							$\frac{2+p_0}{3+p_{23}}$		$\frac{p_0+3}{p_{23}+2}$		$\frac{1+p_0}{0+p_{23}}$	x
1 2 0 3 / 2 1 3 0 / 3 0 2 1 / 0 3 1 2	#205	Quasigroup	x			$\frac{3+p_0}{1+p_{23}}$	$\frac{p_0+2}{p_{23}+0}$			$\frac{0+p_0}{2+p_{23}}$	$\frac{p_0+0}{p_{23}+2}$							$\frac{p_0+1}{p_{23}+3}$	$\frac{1+p_0}{3+p_{23}}$			$\frac{p_0+3}{p_{23}+1}$	$\frac{2+p_0}{0+p_{23}}$			x
1 2 3 0 / 0 3 2 1 / 2 1 0 3 / 3 0 1 2	#221	Quasigroup	x	$\frac{p_0+3}{p_{23}+1}$			$\frac{1+p_0}{0+p_{23}}$	$\frac{p_0+0}{p_{23}+2}$			$\frac{0+p_0}{1+p_{23}}$							$\frac{2+p_0}{3+p_{23}}$			$\frac{p_0+1}{p_{23}+3}$	$\frac{3+p_0}{2+p_{23}}$			$\frac{p_0+2}{p_{23}+0}$		x
1 2 3 0 / 2 1 0 3 / 0 3 2 1 / 3 0 1 2	#227	Quasigroup	x			$\frac{p_0+3}{p_{23}+1}$	$\frac{2+p_0}{0+p_{23}}$			$\frac{p_0+0}{p_{23}+2}$	$\frac{0+p_0}{2+p_{23}}$							$\frac{1+p_0}{p_{23}+2}$	$\frac{p_0+1}{3+p_{23}}$			$\frac{3+p_0}{p_{23}+0}$	$\frac{p_0+2}{p_{23}+0}$			x
1 3 2 0 / 0 2 3 1 / 2 0 1 3 / 3 1 0 2	#268	Quasigroup	x	$\frac{p_0+3}{p_{23}+2}$		$\frac{1+p_0}{0+p_{23}}$				$\frac{p_0+0}{p_{23}+1}$				$\frac{0+p_0}{1+p_{23}}$	$\frac{2+p_0}{3+p_{23}}$						$\frac{p_0+2}{p_{23}+3}$			$\frac{3+p_0}{2+p_{23}}$		$\frac{p_0+1}{p_{23}+0}$	x
2 0 1 3 / 3 1 0 2 / 1 3 2 0 / 0 2 3 1	#307	Quasigroup	x	$\frac{p_0+1}{3+p_{23}}$		$\frac{3+p_0}{2+p_{23}}$				$\frac{p_0+2}{p_{23}+3}$				$\frac{2+p_0}{3+p_{23}}$	$\frac{1+p_0}{1+p_{23}}$						$\frac{p_0+0}{p_{23}+1}$			$\frac{1+p_0}{0+p_{23}}$		$\frac{p_0+3}{p_{23}+2}$	x
2 1 0 3 / 1 2 3 0 / 3 0 1 2 / 0 3 2 1	#348	Quasigroup	x				$\frac{p_0+2}{p_{23}+0}$	$\frac{3+p_0}{1+p_{23}}$			$\frac{p_0+1}{p_{23}+3}$	$\frac{1+p_0}{3+p_{23}}$						$\frac{0+p_0}{2+p_{23}}$	$\frac{p_0+0}{p_{23}+2}$				$\frac{2+p_0}{0+p_{23}}$	$\frac{p_0+3}{p_{23}+1}$			x
2 1 0 3 / 3 0 1 2 / 1 2 3 0 / 0 3 2 1	#354	Quasigroup	x	$\frac{p_0+2}{p_{23}+0}$			$\frac{3+p_0}{2+p_{23}}$	$\frac{p_0+1}{p_{23}+3}$			$\frac{2+p_0}{3+p_{23}}$							$\frac{0+p_0}{1+p_{23}}$			$\frac{p_0+0}{p_{23}+2}$	$\frac{1+p_0}{0+p_{23}}$			$\frac{p_0+3}{p_{23}+1}$		x
2 1 3 0 / 1 2 0 3 / 0 3 1 2 / 3 0 2 1	#370	Quasigroup	x				$\frac{2+p_0}{0+p_{23}}$	$\frac{p_0+3}{p_{23}+1}$			$\frac{1+p_0}{3+p_{23}}$	$\frac{p_0+1}{p_{23}+3}$						$\frac{p_0+0}{p_{23}+2}$	$\frac{0+p_0}{2+p_{23}}$			$\frac{p_0+2}{p_{23}+0}$	$\frac{3+p_0}{1+p_{23}}$			x
2 3 1 0 / 0 1 3 2 / 1 0 2 3 / 3 2 0 1	#410	Quasigroup	x	$\frac{1+p_0}{0+p_{23}}$		$\frac{p_0+3}{p_{23}+2}$				$\frac{2+p_0}{3+p_{23}}$				$\frac{p_0+2}{p_{23}+3}$	$\frac{p_0+0}{p_{23}+1}$						$\frac{0+p_0}{1+p_{23}}$			$\frac{p_0+1}{p_{23}+0}$		$\frac{3+p_0}{2+p_{23}}$	x
2 3 1 0 / 1 0 2 3 / 0 1 3 2 / 3 2 0 1	#416	Quasigroup	x	$\frac{2+p_0}{0+p_{23}}$			$\frac{p_0+3}{3+p_{23}}$	$\frac{1+p_0}{1+p_{23}}$			$\frac{p_0+2}{p_{23}+3}$							$\frac{p_0+0}{p_{23}+1}$			$\frac{0+p_0}{2+p_{23}}$	$\frac{p_0+1}{p_{23}+0}$			$\frac{3+p_0}{1+p_{23}}$		x
3 0 1 2 / 0 3 2 1 / 2 1 0 3 / 1 2 3 0	#438	Quasigroup	x				$\frac{p_0+1}{p_{23}+3}$	$\frac{1+p_0}{3+p_{23}}$			$\frac{p_0+2}{p_{23}+0}$	$\frac{3+p_0}{1+p_{23}}$						$\frac{2+p_0}{0+p_{23}}$	$\frac{p_0+3}{p_{23}+1}$			$\frac{0+p_0}{2+p_{23}}$	$\frac{p_0+0}{p_{23}+2}$			x
3 0 1 2 / 2 1 0 3 / 0 3 2 1 / 1 2 3 0	#449	Quasigroup	x	$\frac{p_0+1}{p_{23}+3}$			$\frac{p_0+0}{2+p_{23}}$	$\frac{p_0+2}{p_{23}+0}$			$\frac{p_0+0}{2+p_{23}}$				$\frac{1+p_0}{0+p_{23}}$						$\frac{p_0+3}{p_{23}+1}$	$\frac{0+p_0}{1+p_{23}}$			$\frac{p_0+0}{p_{23}+2}$		x
3 0 2 1 / 0 3 1 2 / 1 2 0 3 / 2 1 3 0	#460	Quasigroup	x				$\frac{1+p_0}{3+p_{23}}$	$\frac{p_0+1}{p_{23}+3}$			$\frac{2+p_0}{0+p_{23}}$	$\frac{p_0+3}{p_{23}+1}$						$\frac{p_0+2}{p_{23}+0}$	$\frac{3+p_0}{1+p_{23}}$			$\frac{p_0+0}{p_{23}+2}$	$\frac{0+p_0}{2+p_{23}}$			x
3 1 0 2 / 2 0 1 3 / 0 2 3 1 / 1 3 2 0	#496	Quasigroup	x	$\frac{p_0+2}{p_{23}+3}$		$\frac{2+p_0}{3+p_{23}}$				$\frac{p_0+1}{0+p_{23}}$				$\frac{3+p_0}{2+p_{23}}$	$\frac{1+p_0}{0+p_{23}}$						$\frac{p_0+3}{p_{23}+2}$			$\frac{0+p_0}{1+p_{23}}$		$\frac{p_0+0}{p_{23}+1}$	x
3 2 0 1 / 0 1 3 2 / 1 0 2 3 / 2 3 1 0	#530	Quasigroup	x	$\frac{1+p_0}{3+p_{23}}$			$\frac{p_0+2}{p_{23}+3}$	$\frac{3+p_0}{0+p_{23}}$			$\frac{p_0+3}{p_{23}+2}$							$\frac{p_0+1}{p_{23}+0}$			$\frac{3+p_0}{1+p_{23}}$	$\frac{p_0+0}{p_{23}+1}$			$\frac{0+p_0}{2+p_{23}}$		x
3 2 0 1 / 1 0 2 3 / 0 1 3 2 / 2 3 1 0	#536	Quasigroup	x	$\frac{2+p_0}{3+p_{23}}$			$\frac{p_0+2}{p_{23}+3}$	$\frac{1+p_0}{0+p_{23}}$			$\frac{p_0+3}{p_{23}+2}$	$\frac{p_0+1}{p_{23}+0}$										$\frac{3+p_0}{2+p_{23}}$	$\frac{p_0+0}{p_{23}+1}$			$\frac{0+p_0}{1+p_{23}}$	x
1 2 0 3 / 3 0 2 1 / 2 1 3 0 / 0 3 1 2	#212	Quasigroup	x			$\frac{p_0+2}{p_7+1}$ $p_{16}+3$ $p_{23}+0$	$\frac{3+p_0}{1+p_7}$ $0+p_{16}$ $2+p_{23}$			x	$\frac{0+p_0}{2+p_7}$ $3+p_{16}$ $1+p_{23}$			$\frac{p_0+0}{p_7+3}$ $p_{16}+1$ $p_{23}+2$	$\frac{p_0+1}{p_7+2}$ $p_{16}+0$ $p_{23}+3$			$\frac{2+p_0}{0+p_7}$ $1+p_{16}$ $3+p_{23}$	x			$\frac{1+p_0}{3+p_7}$ $2+p_{16}$ $0+p_{23}$	$\frac{p_0+3}{p_7+0}$ $p_{16}+2$ $p_{23}+1$			x
1 3 2 0 / 2 0 1 3 / 0 2 3 1 / 3 1 0 2	#273	Quasigroup	x			$\frac{2+p_0}{1+p_7}$ $3+p_{16}$ $0+p_{23}$	$\frac{p_0+3}{p_7+1}$ $p_{16}+0$ $p_{23}+2$			x	$\frac{p_0+0}{p_7+2}$ $p_{16}+3$ $p_{23}+1$			$\frac{0+p_0}{3+p_7}$ $1+p_{16}$ $2+p_{23}$	$\frac{1+p_0}{p_7+0}$ $0+p_{16}$ $3+p_{23}$			$\frac{p_0+2}{p_7+3}$ $p_{16}+1$ $p_{23}+3$	x			$\frac{p_0+1}{p_7+3}$ $p_{16}+2$ $p_{23}+3$	$\frac{3+p_0}{2+p_7}$ $0+p_{16}$ $1+p_{23}$			x
2 0 1 3 / 1 3 2 0 / 3 1 0 2 / 0 2 3 1	#302	Quasigroup	x			$\frac{3+p_0}{0+p_7}$ $2+p_{16}$ $1+p_{23}$	$\frac{p_0+1}{p_7+3}$ $p_{16}+0$ $p_{23}+0$			x	$\frac{p_0+2}{p_7+0}$ $p_{16}+1$ $p_{23}+3$			$\frac{1+p_0}{2+p_7}$ $0+p_{16}$ $3+p_{23}$	$\frac{0+p_0}{3+p_7}$ $1+p_{16}$ $2+p_{23}$			$\frac{p_0+0}{p_7+2}$ $p_{16}+3$ $p_{23}+1$	x			$\frac{p_0+3}{p_7+1}$ $p_{16}+0$ $p_{23}+2$	$\frac{2+p_0}{1+p_7}$ $3+p_{16}$ $0+p_{23}$			x
2 1 3 0 / 0 3 1 2 / 1 2 0 3 / 3 0 2 1	#363	Quasigroup	x			$\frac{p_0+3}{p_7+0}$ $p_{16}+2$ $p_{23}+1$	$\frac{1+p_0}{3+p_7}$ $0+p_{16}$ $2+p_{23}$			x	$\frac{p_0+2}{p_7+0}$ $p_{16}+1$ $p_{23}+3$			$\frac{p_0+0}{p_7+2}$ $p_{16}+0$ $p_{23}+3$	$\frac{p_0+3}{p_7+3}$ $p_{16}+2$ $p_{23}+2$			$\frac{0+p_0}{2+p_7}$ $3+p_{16}$ $1+p_{23}$	x			$\frac{3+p_0}{1+p_7}$ $p_{16}+3$ $2+p_{23}$	$\frac{2+p_0}{p_7+1}$ $p_{16}+3$ $p_{23}+2$			x
3 0 2 1 / 1 2 0 3 / 0 3 1 2 / 2 1 3 0	#465	Quasigroup	x			$\frac{p_0+1}{p_7+2}$ $p_{16}+0$ $p_{23}+3$	$\frac{2+p_0}{0+p_7}$ $1+p_{16}$ $3+p_{23}$			x	$\frac{1+p_0}{3+p_7}$ $2+p_{16}$ $0+p_{23}$			$\frac{p_0+3}{p_7+0}$ $p_{16}+1$ $p_{23}+1$	$\frac{p_0+1}{p_7+1}$ $p_{16}+0$ $p_{23}+0$			$\frac{3+p_0}{1+p_7}$ $0+p_{16}$ $2+p_{23}$	x			$\frac{0+p_0}{2+p_7}$ $3+p_{16}$ $1+p_{23}$	$\frac{p_0+0}{p_7+3}$ $p_{16}+2$ $p_{23}+2$			x
3 1 0 2 / 0 2 3 1 / 2 0 1 3 / 1 3 2 0	#484	Quasigroup	x			$\frac{1+p_0}{p_7+1}$ $0+p_{16}$ $3+p_{23}$	$\frac{p_0+2}{p_7+0}$ $p_{16}+1$ $p_{23}+3$			x	$\frac{p_0+1}{p_7+0}$ $p_{16}+3$ $p_{23}+0$			$\frac{3+p_0}{2+p_7}$ $1+p_{16}$ $0+p_{23}$	$\frac{2+p_0}{3+p_7}$ $0+p_{16}$ $2+p_{23}$			$\frac{p_0+3}{p_7+2}$ $p_{16}+0$ $p_{23}+2$	x			$\frac{p_0+0}{p_7+3}$ $p_{16}+2$ $p_{23}+1$	$\frac{0+p_0}{3+p_7}$ $1+p_{16}$ $2+p_{23}$			x
0 2 3 1 / 3 1 0 2 / 1 3 2 0 / 2 0 1 3	#91	Quasigroup	$\frac{x}{p_3+0}$ $0+p_4$ $3+p_8$ $p_{11}+2$ $p_{13}+3$ $1+p_{19}$ $p_{20}+1$			$\frac{0+p_0}{p_4+0}$ $3+p_7$ $p_{15}+3$ $1+p_{16}$ $p_{19}+1$ $2+p_{23}$	$\frac{0+p_0}{0+p_4}$ p_7+2 $3+p_{11}$ $1+p_{15}$ $p_{16}+3$ $2+p_{20}$			$\frac{x}{3+p_3}$ $2+p_4$ $1+p_8$ $p_{11}+1$ $p_{13}+2$ $0+p_{19}$ $p_{20}+2$	$\frac{x}{p_3+3}$ $3+p_4$ p_7+1 $0+p_{11}$ $1+p_{12}$ $0+p_{20}$ $3+p_{23}$			$\frac{2+p_0}{1+p_3}$ $1+p_8$ p_7+3 $0+p_{11}$ $2+p_{15}$ $p_{19}+2$ $0+p_{23}$	$\frac{x}{3+p_0}$ $0+p_4$ p_7+0 $2+p_{11}$ $p_{15}+2$ $2+p_{15}$ $1+p_{20}$			$\frac{p_0+1}{3+p_3}$ p_7+0 $3+p_{11}$ $p_{16}+2$ $2+p_{15}$ $3+p_{20}$	$\frac{p_3+1}{0+p_8}$ $0+p_8$ $p_{11}+0$ $2+p_{15}$ $1+p_{19}$ $p_{19}+0$			$\frac{p_0+2}{2+p_3}$ $2+p_8$ p_7+3 $0+p_{11}$ $1+p_{16}$ $3+p_{20}$ $p_{23}+3$	$\frac{1+p_0}{0+p_4}$ $2+p_8$ $p_{11}+1$ $0+p_{15}$ $p_{19}+3$ $p_{20}+3$			$\frac{x}{p_3+2}$ $1+p_4$ $2+p_8$ $p_{11}+0$ $0+p_{15}$ $p_{20}+0$ $p_{20}+3$

			p_0	p_1	p_2	p_3	p_4	p_5	p_6	p_7	p_8	p_9	p_{10}	p_{11}	p_{12}	p_{13}	p_{14}	p_{15}	p_{16}	p_{17}	p_{18}	p_{19}	p_{20}	p_{21}	p_{22}	p_{23}
0 3 1 2 2 1 3 0 3 0 2 1 1 2 0 3	$\neq_{110}$	Quasigroup	x $0+p_3$ p_4+0 p_8+3 $2+p_{11}$ $3+p_{15}$ $p_{19}+2$ $1+p_{20}$			x p_0+0 $0+p_4$ p_7+3 $2+p_8$ $3+p_{15}$ $p_{16}+1$ $1+p_{19}$ $p_{23}+2$	x $0+p_0$ p_3+0 $2+p_7$ $p_{13}+3$ $p_{13}+1$ $3+p_{16}$ $p_{20}+2$ $1+p_{23}$			x $3+p_3$ p_4+2 p_8+1 $1+p_{11}$ $0+p_{12}$ $p_{15}+3$ $p_{19}+0$ $2+p_{20}$	x $3+p_0$ p_3+2 $1+p_7$ $p_{11}+1$ $p_{12}+3$ $0+p_{16}$ $p_{20}+0$ $2+p_{23}$			x p_0+2 $3+p_4$ p_7+1 $1+p_8$ $0+p_{15}$ $p_{16}+3$ $2+p_{19}$ $p_{23}+0$	x p_0+3 $1+p_4$ p_7+0 $3+p_8$ $2+p_{15}$ $p_{16}+2$ $0+p_{19}$ $p_{23}+1$			x $1+p_0$ p_3+3 $3+p_7$ $p_{11}+0$ $p_{12}+2$ $2+p_{16}$ $p_{20}+1$ $0+p_{23}$	x $1+p_3$ p_4+3 p_8+0 $3+p_{11}$ $2+p_{12}$ $p_{15}+2$ $p_{19}+1$ $0+p_{20}$			x $2+p_0$ p_3+1 $0+p_7$ $p_{11}+2$ $p_{12}+0$ $1+p_{16}$ $p_{20}+3$ $3+p_{23}$	x p_0+1 $2+p_4$ p_7+2 $0+p_8$ $1+p_{15}$ $p_{16}+0$ $3+p_{19}$ $p_{23}+3$			x $2+p_3$ p_4+1 p_8+2 $0+p_{11}$ $1+p_{12}$ $p_{15}+0$ $p_{19}+3$ $3+p_{20}$