

Table 3. Isomorphic patterns: these patterns are regarded as same shape.

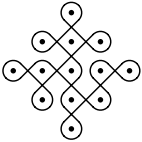
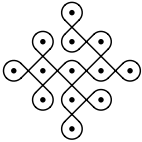
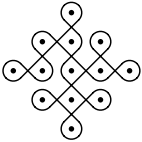
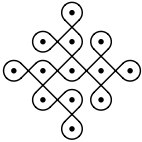
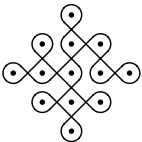
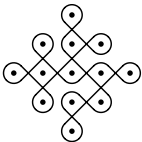
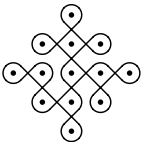
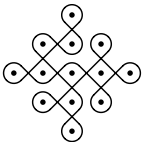
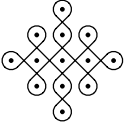
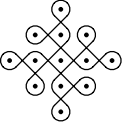
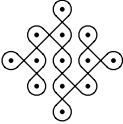
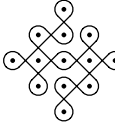
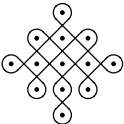
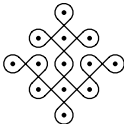
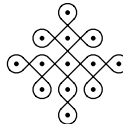
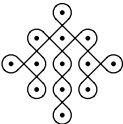
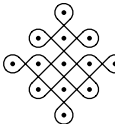
		90° Rotation	180° Rotation	270° Rotation
				
	F57C (1-5-1)	CEFD (1-5-1)	BEAF (1-5-1)	BF73 (1-5-1)
Vertical Reflection				
	DCEF (1-5-1)	D7F5 (1-5-1)	F73B (1-5-1)	AFE3 (1-5-1)
	2-Axial, 180° Rotational			
				
9FF9 (1-5-1)	BE7D (1-5-1)	BDBD (1-5-1)	AFF5 (1-5-1)	
1-Axial				
				
FFF9 (1-5-1)	AFF3 (1-5-1)	F779 (1-5-1)	FDB9 (1-5-1)	BFFB (1-5-1)

Fig. 11. The 9 symmetrical patterns drawn on 1-5-1 array of points.

drawn. The number of one-stroke patterns is 11,661,312 (0.017%). Among them, 1,458,430 are unique without isomorphic patterns, and only 1,520 are symmetrical. The 24 patterns of especially highly symmetrical form are shown in Fig. 13.

4. Conversion into Linear Diagram and Analysis of “Diamond Carpet”

4.1. Conversion into linear diagram

In order to make it easy to grasp the structure of a complicated Kolam pattern, it is