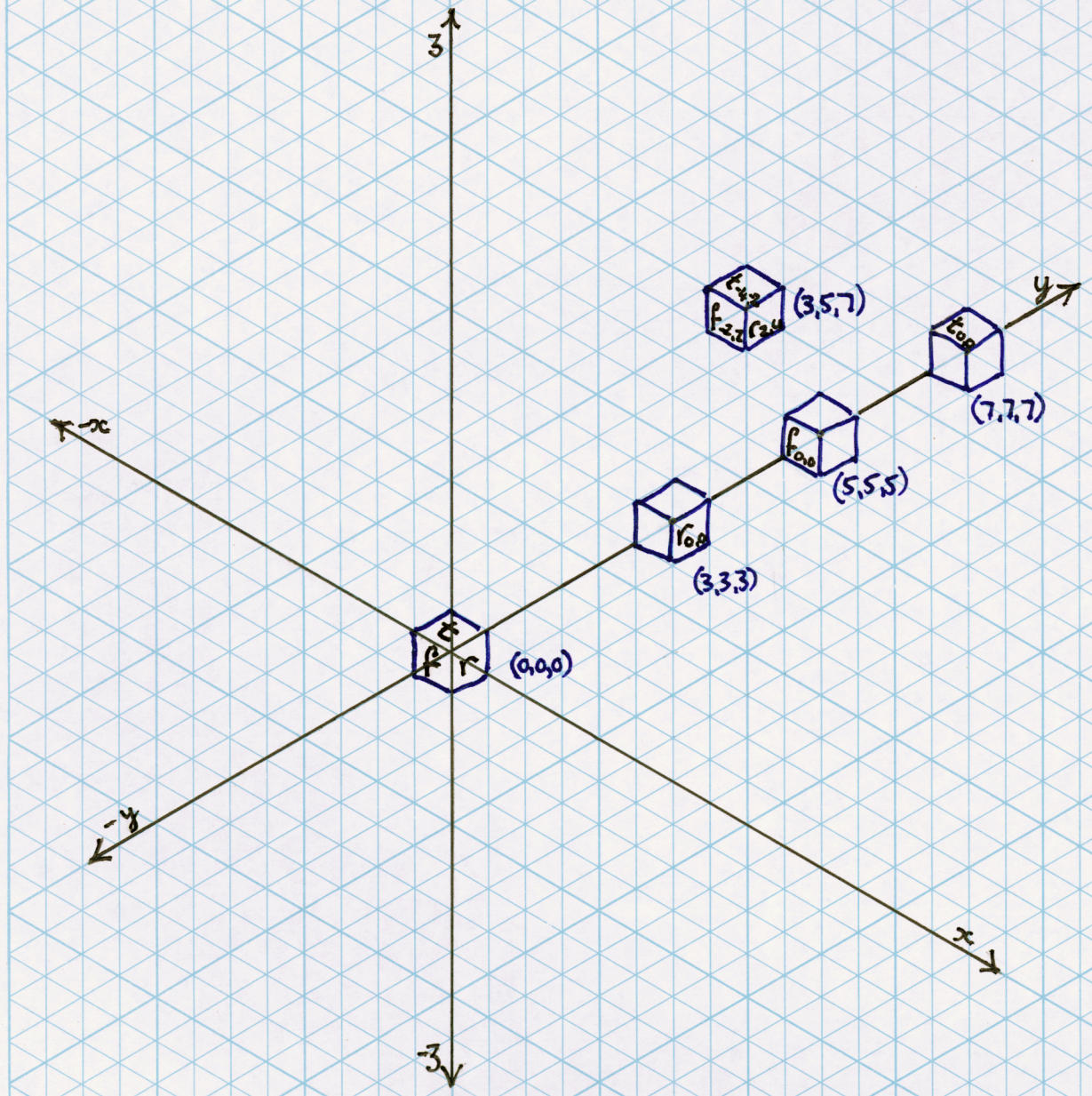
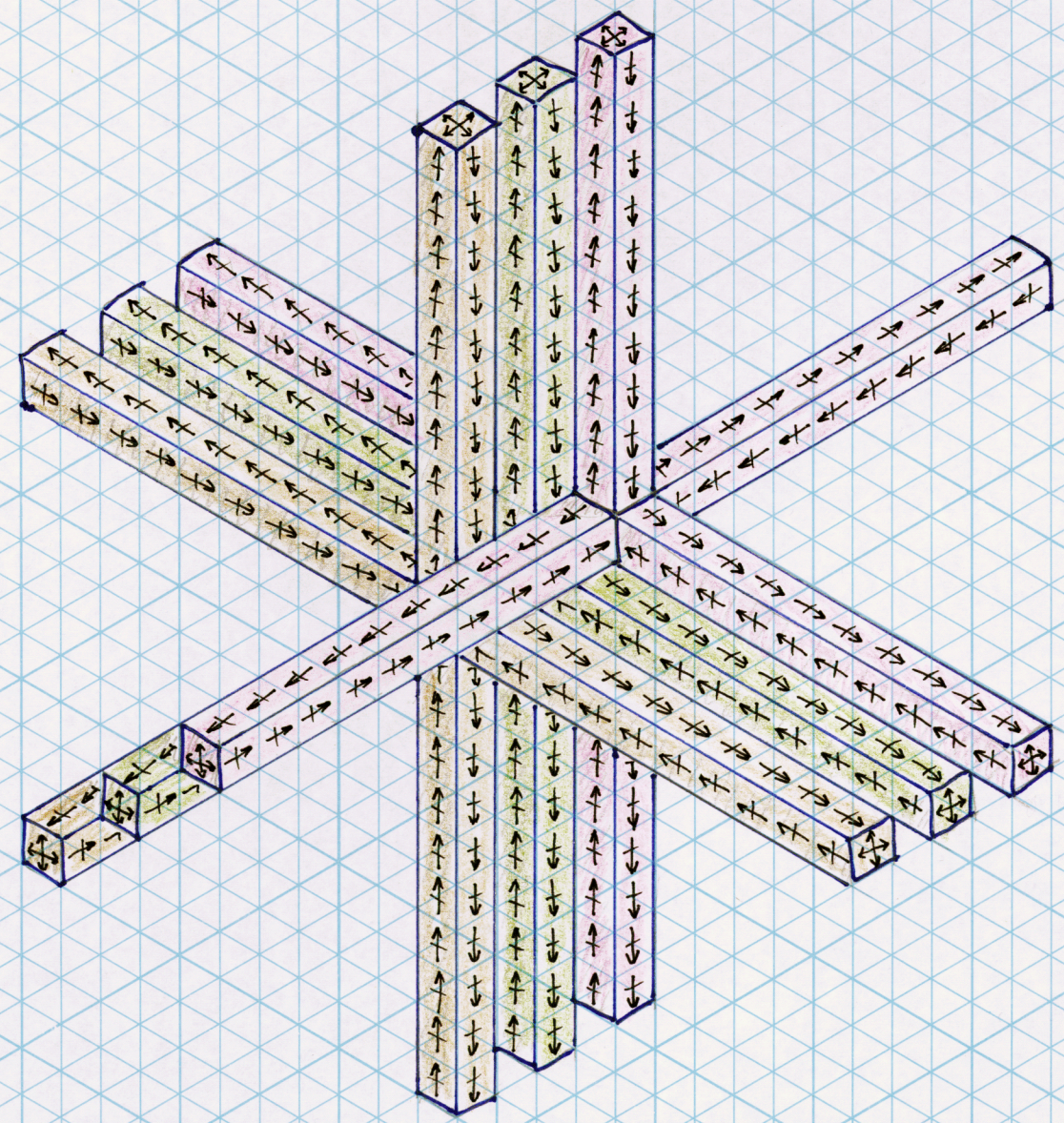
CUBE 4 J.TAYLOR Results of June, 2010

GORMACK GRAPH PAPERS : CHRISTCHURCH N.Z. L110X Isometric grid

Note that the x-y plane is rotated from the usual for ease of depiction and description. The offset method identifies the 2D co-ordinates of each of right (r), front (f) and top(t) faces of a cube at (x,y,z). The 2D co-ordinates give the position of the face in the 2D tiling covering its plane.

(x, y, z)		(3, 5, 7)	
r	y-x z-x	r	2 4
x-y	f	-2	f 2
x-z	y-z t	-4	-2 t



A cube at (K,K,K) has each of its horizontal faces, which are Cross tiles, central in a 2D tiling (big Cross tiling) and each of its vertical faces central in 2D big Arrow tiling (2 pointing up and 2 pointing down). The major axes of these 2D tilings run along pairs of the 6 arms of the big structure. These structures are stacked in (1,1,1) direction (for ease of argument).