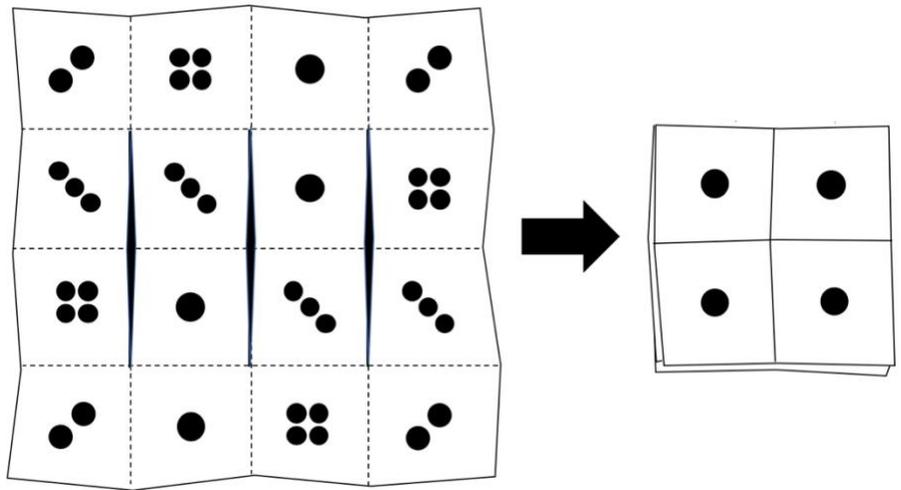


# 2D - KNOW WHEN TO FOLD 'EM



Later that week, Darnell joined his friend Deb at her beloved Folded Frappe, which met on the fifth Friday of each month. Participants would gather at local coffee shops, throw back a frappe or latte and maybe a scone and try their hand at some challenging origami constructions. Deb was eager to show Darnell her new puzzle.

“It’s a 4 x 4 grid with horizontal and vertical folds and three vertical slits,” Deb explained. “The puzzle is **based on sixteen** squares: four have one dot, four have two dots, four have three, and four have four. The object is to fold it up into a 2 x 2 grid with all the same dots showing: all ones, then all twos, then all threes and then all fours.”

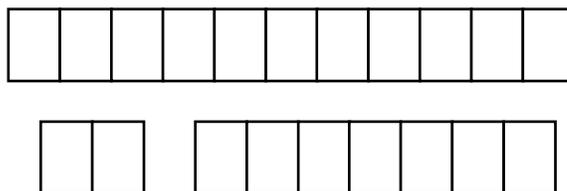


“Like this,” said Darnel holding up the four ones. “That was easy!”

“Yeah,” Deb agreed, “but they just get progressively harder and harder. You’ll feel so confounded, you’ll think someone has put some sort of **hex** on you!”

It took Darnell longer than he thought it would to figure them all out. “To get the fours, I had to think outside the box... or maybe I should say – on top of the box. Now I see that each 2x2 solution has a little extra plus in it with these paired numbers and letters, five pairs in each.”

“Hmm,” Deb pondered, “12, 0E, 06... where have I seen those before?”



# 2D - KNOW WHEN TO FOLD 'EM

First cut out the large border square, then carefully fold back and forth along each of the six dotted lines. Then, cut along the three slits. (These cuts are most easily made by folding the square in half perpendicular to these slits and then making three short cuts – just one square length – across the seam as shown at right.)

