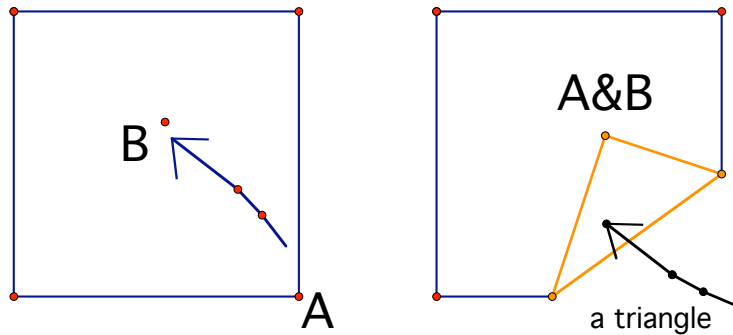


Folding TUPs

inspired by Kazuo Haga's "Folding Paper and Enjoy Math: Origamics" in *Origami: Third International Meeting of Origami Science, Mathematics, and Education*.

1. Take a piece of patty paper and label the lower right-hand corner A . Pick a random point on the paper and label that point B .
2. Fold the paper so that A lies on top of B . This creates a flap of paper, called the Turned-Up Part (or TUP for short).



3. How many sides does your TUP have? Three? Four? Five?
4. Experiment with many TUPs to find an answer to the question, "How can we tell how many sides a TUP will have?"
5. What if we allowed the point B to be outside the square? Then what are the possibilities?