

February 6: Counting

Pizza Pieces Options

Motivation for Problem: Every Friday night my husband and I eat dinner with our oldest son. Frequently the meal is pizza which results in a discussion of the pieces presented.

Assume a robot is responsible for dividing the finished pizza using a specific number of cuts, designated by an identifier n , executed using a straight-line cutter capable of reaching “across” the pizza.

**The robot, randomly and independently, picks $2n$ distinct marks on the perimeter of the pizza.
Then uses his cutter to “connect” the marks in pairs.
The order of the cuts is inconsequential.**

Explore this problem with regard to the pieces that are created.

Image from walmart.com
and Cuisinart