## Problem of the Week Problem D Another Path Using Math

A landscaper needs to fill a path measuring 2 feet by 8 feet with patio stones. The patio stones are each 1 foot by 2 feet, so the landscaper calculates that she will need 8 of them.

Before arranging the patio stones, the landscaper wants to look at all her options. She can not cut or overlap the stones, and they all must fit inside the path area without any gaps. Two possible arrangements of the stones are shown below. How many different arrangements are there in total?