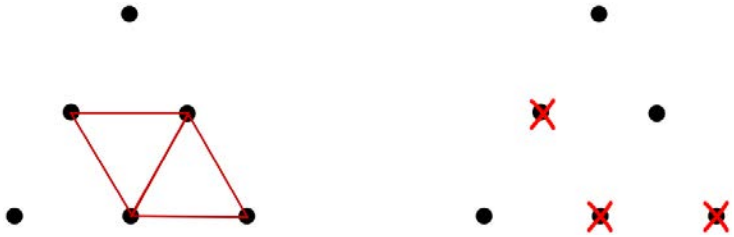
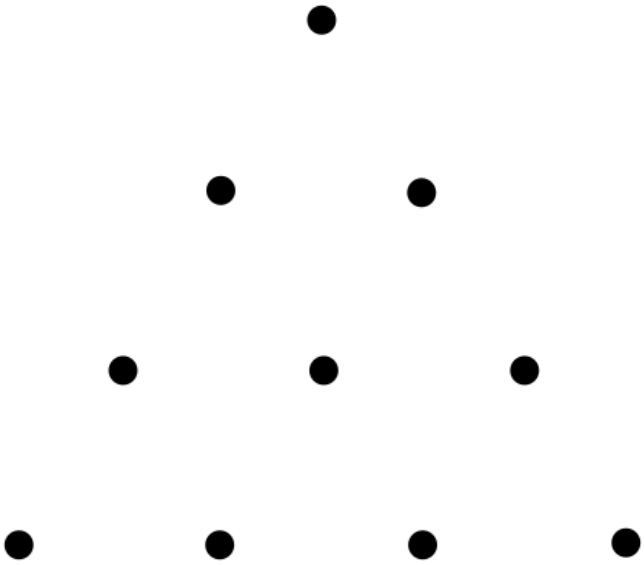
Puzzle of the Week
Avoiding Triangles

A *regular triangle* is a triangle with equal sides and equal angles. In this first pyramid, two regular triangles have been made using the dots. In the second pyramid, enough dots have been crossed out that it is impossible to find three dots that form a regular triangle.



THE CHALLENGE: What is the fewest number of dots you can remove from this pyramid so that there are no equilateral triangles of any size or orientation formed by the dots?



EXPLORATION: Can you cross out fewer dots than the introductory example to solve the six-dot pyramid? Do you see a pattern of solutions that would suggest solutions for larger pyramids?