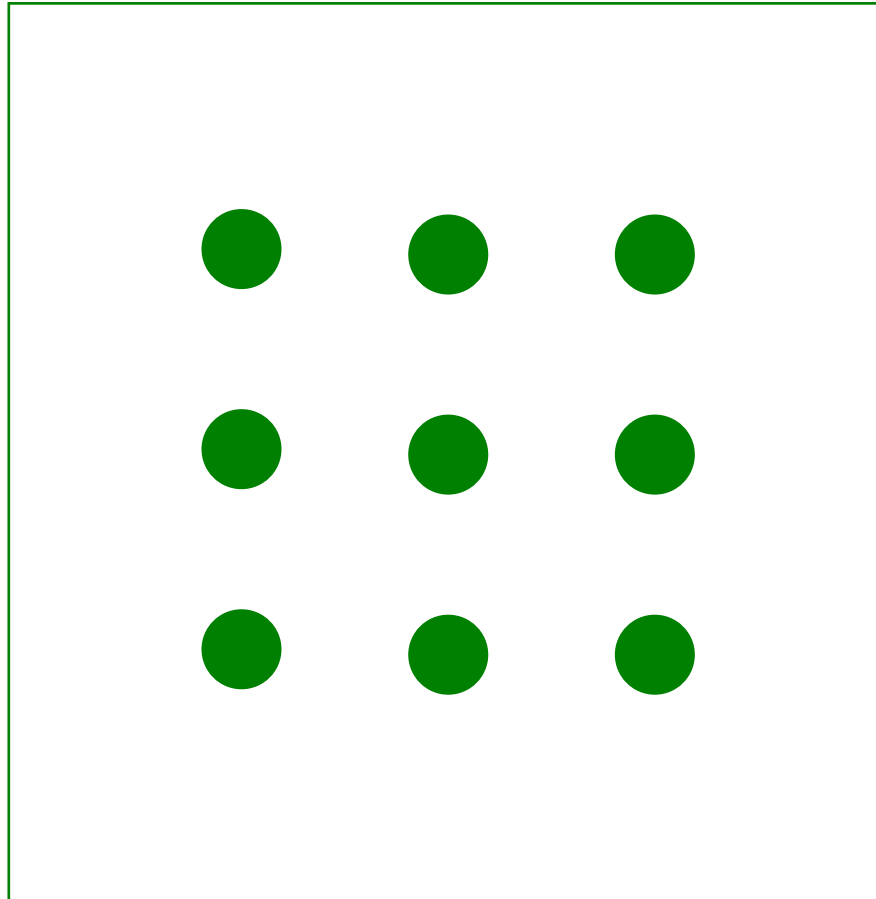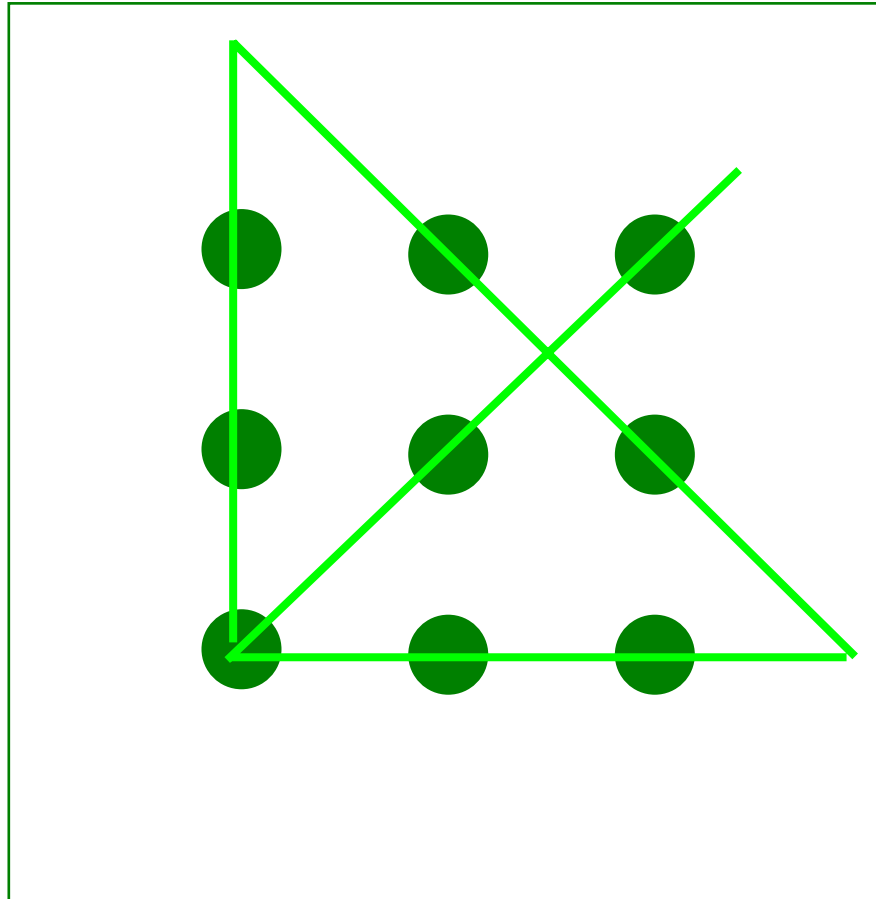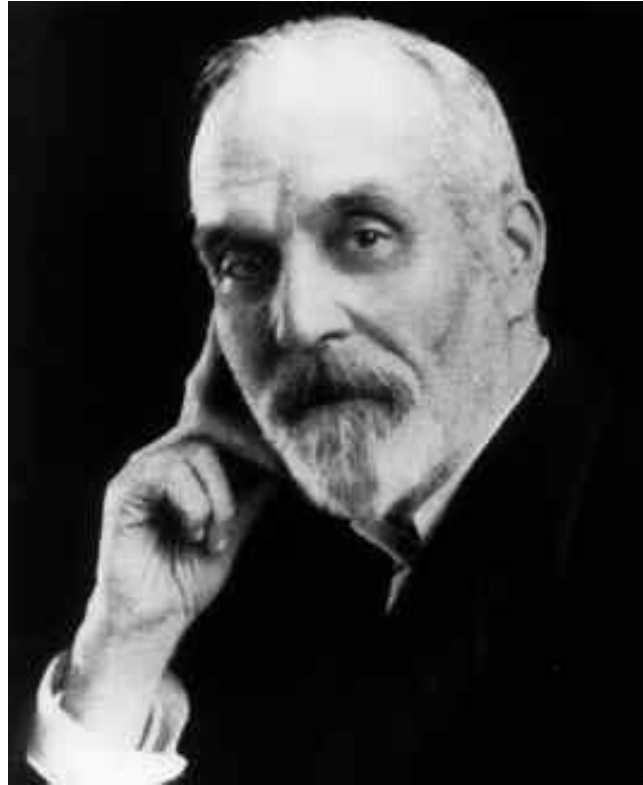# Out of the box !!!

Find the best solution to connect the **nine points** together with no more than **four straight lines** without lifting your writing instrument.

What assumptions are you making?

If you do not assume that you cannot extend your lines beyond the imaginary square formed by the box the puzzle becomes easier to solve.

Henry Dudeney
Born 10th April 1857

Dudeney is best known for his publications of mathematical problems and pastimes, some of which provoked serious mathematical research

Lexicon

The thought behind thinking outside the box.

By Peter Rojas

From the July 2000 issue

It used to take years for an expression to diffuse throughout society and age into a cliché, but in the information age a phrase can speed from hip to passé in months. Take the expression "thinking outside the box." A few years ago it embodied the creative and unconventional thinking the Internet revolution demanded. Now, drop the phrase at a board meeting and you're likely to hear groans and jeers. It's so 1995.

How did an expression used by hardly anyone ten years ago become one of the most tired expressions of the '90s? The phrase has its origins in a brainteaser called "The Puzzle of the Nine Dots," from early 20th century British mathematician Henry Ernest Dudeney. The object of the puzzle is to connect nine dots in a three-by-three grid without lifting pen from paper, using just four straight lines. The only way to solve the puzzle is to draw lines beyond the nine dots.

The puzzle was lifted from obscurity by its appearance in the late '50s in Martin Gardner's mathematics column in *Scientific American,* and it appeared again in Jim Fixx's book, *Solve It! A Perplexing Profusion of Puzzles* (Doubleday, 1978). The puzzle's counterintuitive solution inspired a useful metaphor for unorthodox thinking; by the late '70s the phrase "thinking outside the box" was used sporadically.

Curiously, the expression didn't appear in print until 1984, when it surfaced in the February 6 issue of *Fortune* and later that year in Edward Prestwood's book, *The Creative Writer's Phrase-Finder* (ETC Publications, 1984). Mr. Prestwood uses the expression in introducing the "Puzzle of the Nine Dots" as a tool for writers to jump-start their creativity.

In *Fortune,* the phrase was used in the way that has become notorious: to try to get managers to think differently. In reporting that middle managers were not sharing gains of the economic recovery of the mid-'80s, the writer quotes C. William Gray, then CEO of Gradall. During the 1982 recession, Mr. Gray exhorted his managers to be "cross functional" and "think outside of the box" if the company was going to survive.

By the early '90s, "thinking outside the box" was on the lips of countless management consultants who told executives that a rapidly changing economic landscape required new approaches to problem solving. Fittingly, Mr. Gray (who, when contacted for this article, was unaware that his use of the phrase was the first to appear in print) is now a management consultant himself.
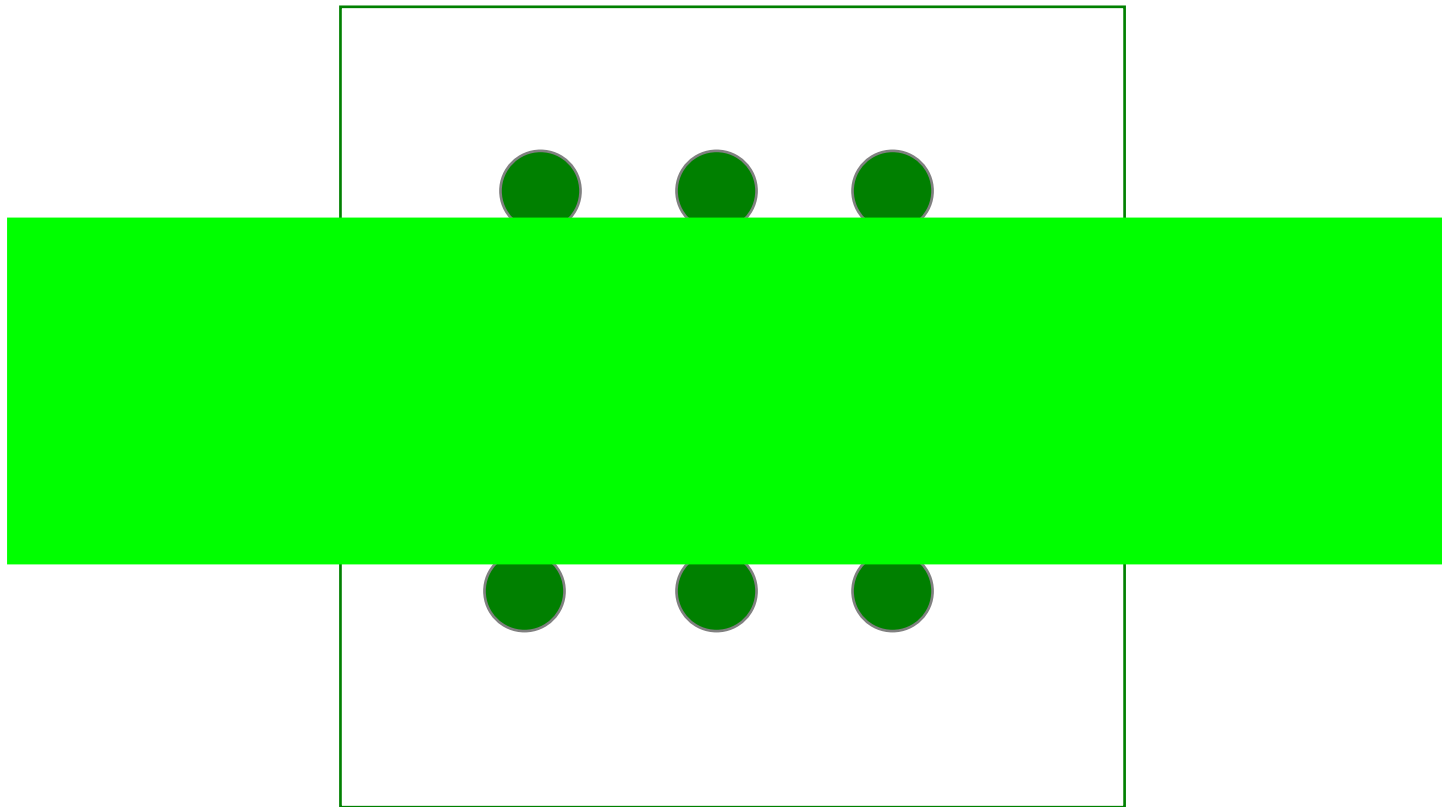
Today the phrase withers from overuse and has lost much of its forcefulness as a metaphor. The shorthand for the need for new solutions has become a victim of its own success -- what once could engender new thinking now needs to be rethought.
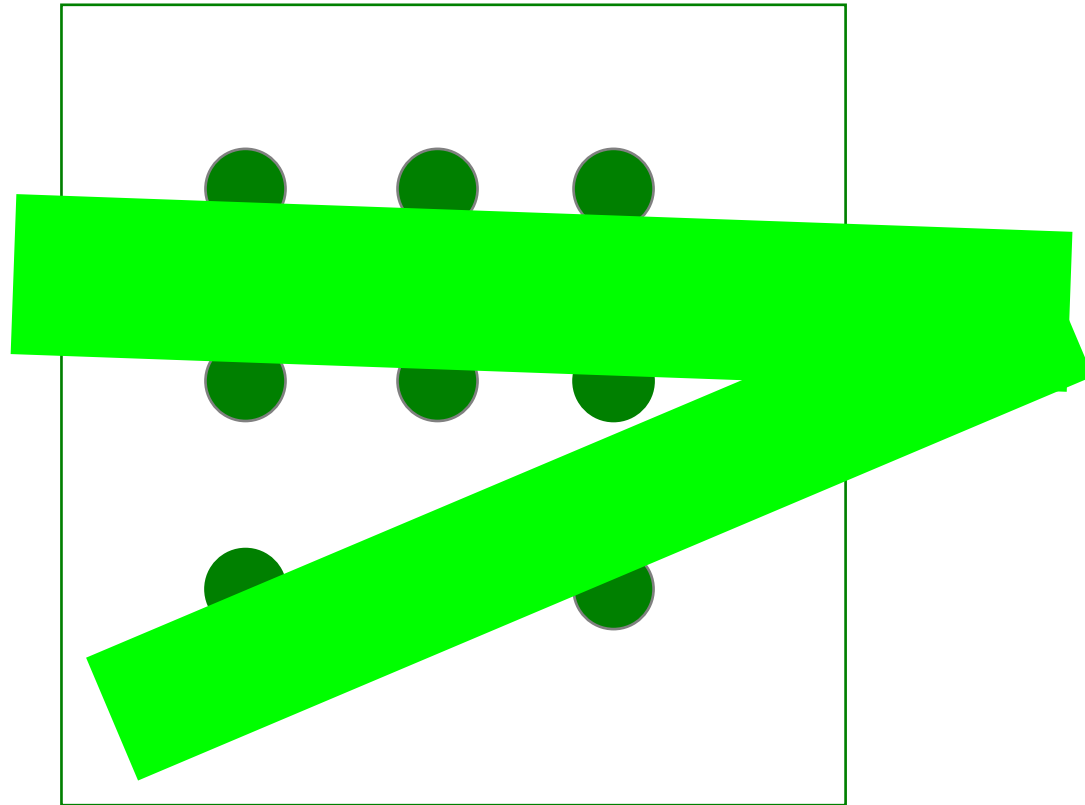
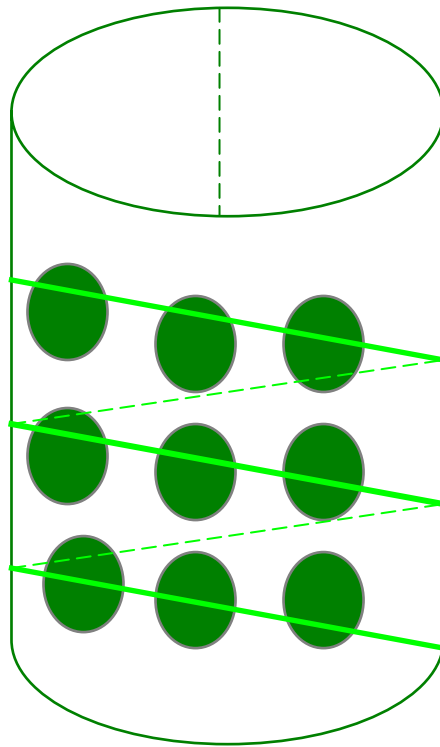Don't assume that the lines must pass through the center of the dots.
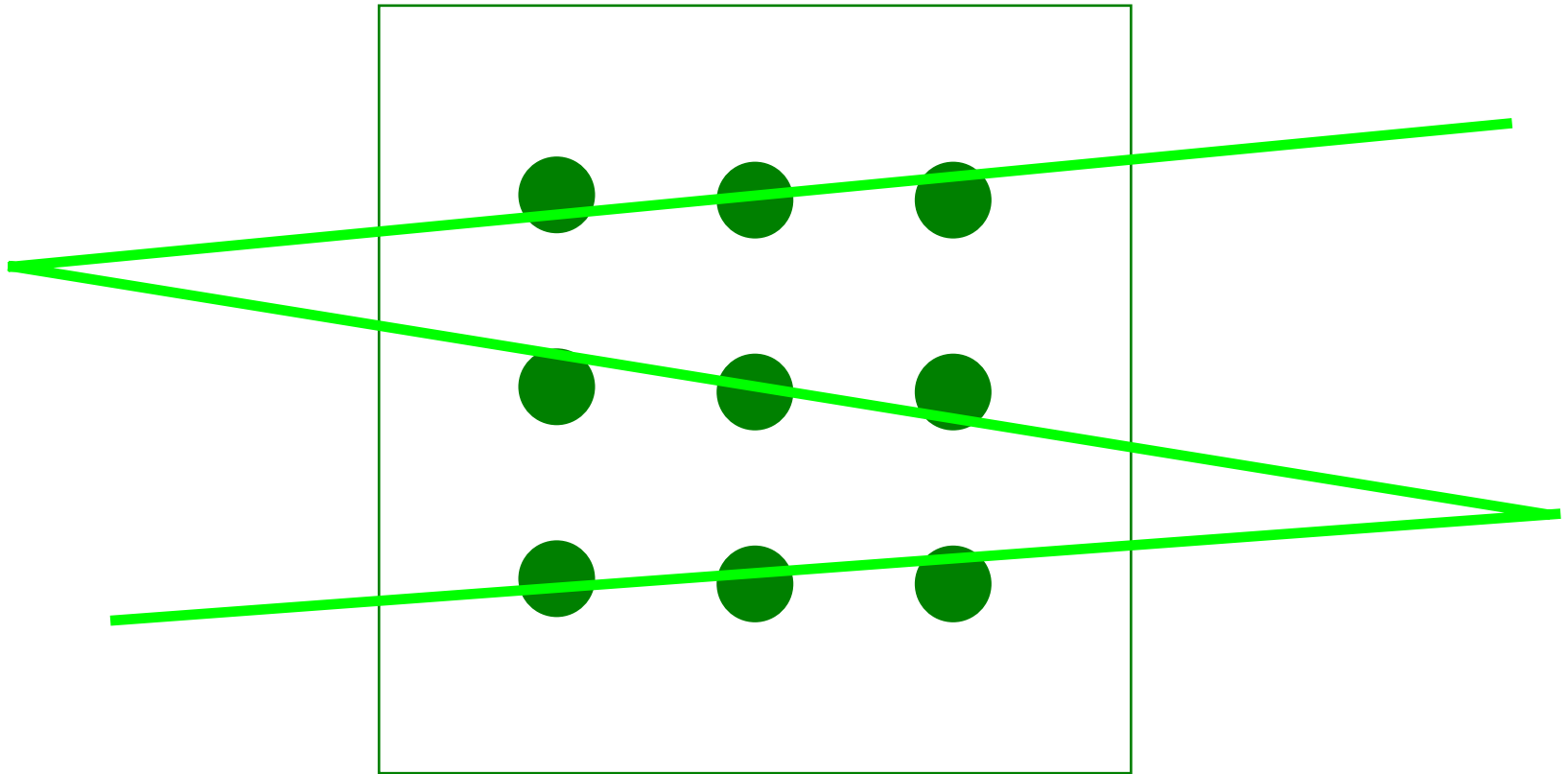
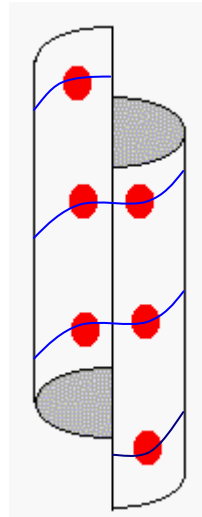Don't assume that the line must be **thin**.

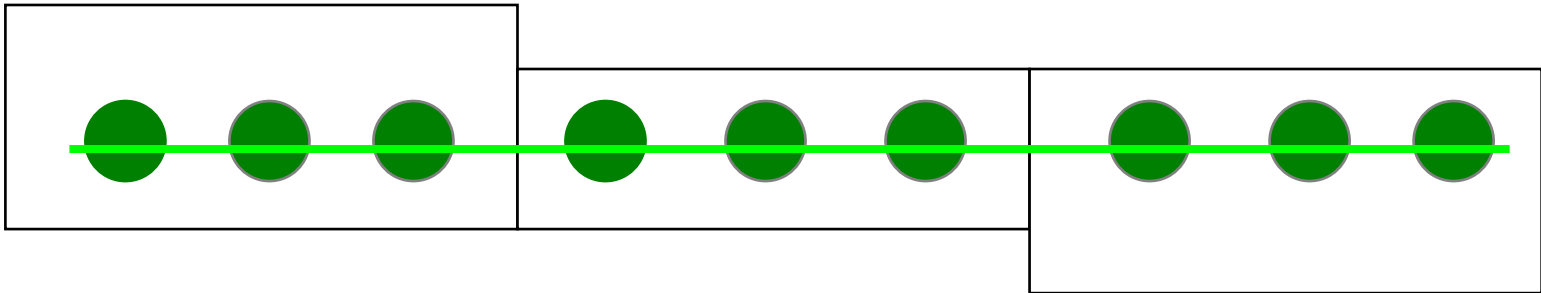Just to prove I can do it with **two** lines.

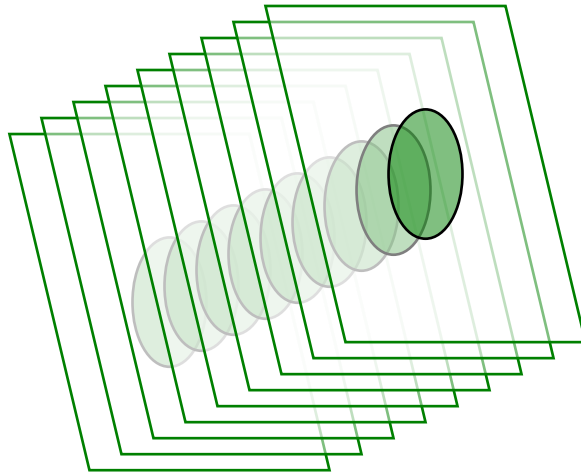Don't assume that the paper must be **flat**.
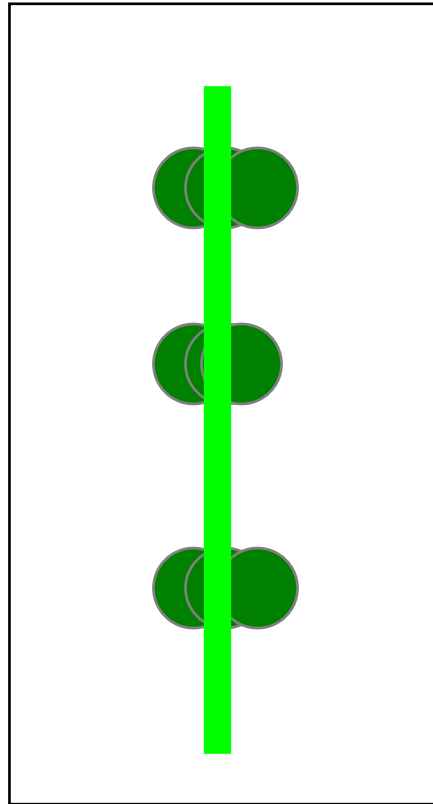
Don't assume that the paper must be flat (another way).

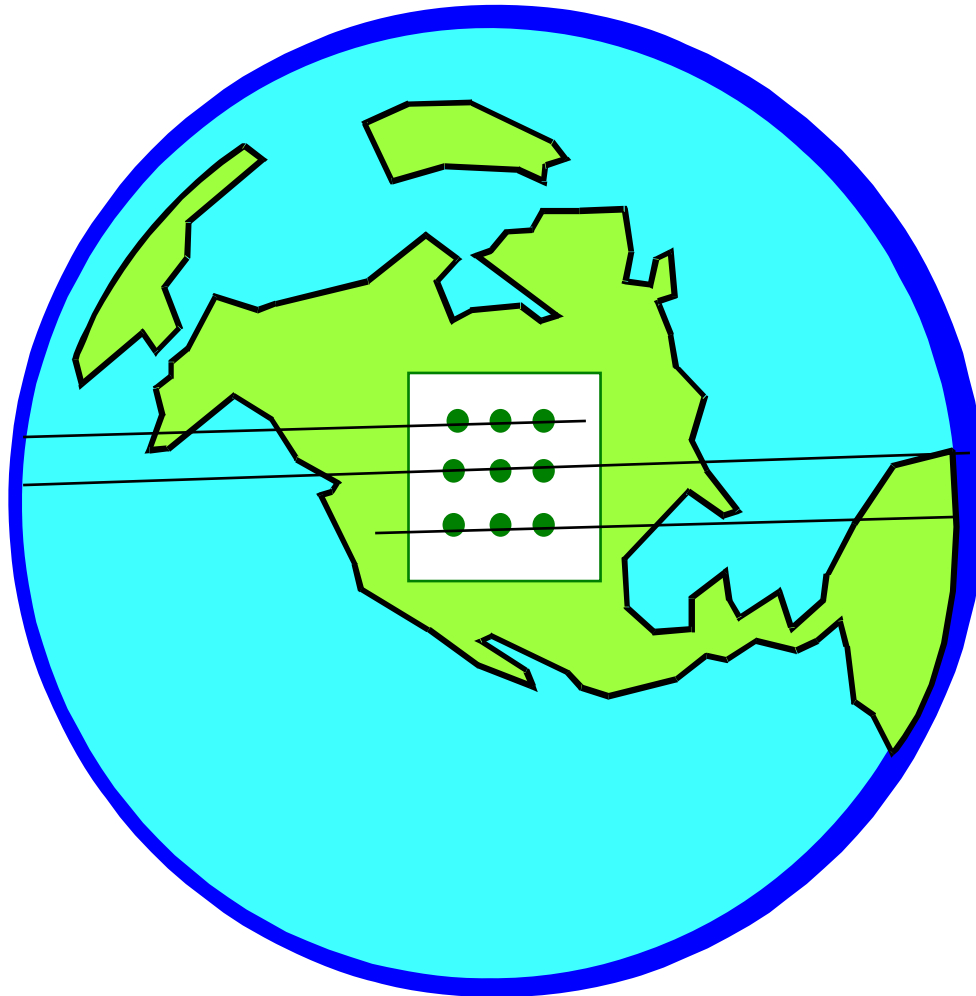Don't assume that you cannot **rip** the paper.

If you **rip** the paper into nine segments, you can **stack** them and **poke** your point through **all at once**.

Don't assume that you cannot **crease** the paper.

Don't assume that the lines cannot **extend** beyond the **edge** of the paper.

crease the paper

\+

extend beyond the edge of the paper