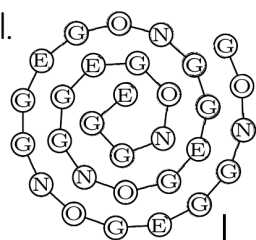


MathsJam Shout

December 2023
Ottawa MathsJam

Play Ooooooh, Eggnog!

Players take turns, each on their own spiral. On each turn, shade in a circle and feel its hangover.



Action	Hangover
Shading a G	Shade an adjacent circle
Shading an E	Shade a circle an even no. of edges away
Shading an N	Shade nothing else this turn; next turn, ignore your hangover
Shading an O	No hangover

Play stops when a player has all non-O circles shaded. The person with the greatest number of Os left unshaded wins!

Printable spirals: bit.ly/ooooheggnog

Puzzle Winter Sums

$$\begin{array}{rcl} \text{Bomb} & - & \text{Tree} = 1 \\ \text{Bomb} & \times & \text{Tree} = \text{Sled} \\ \frac{\text{Bomb}}{\text{Tree}} & = & \frac{1}{\text{Sled}} \end{array}$$

Make Snowflake



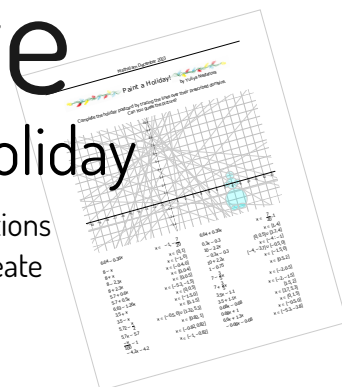
Make a beautiful paper snowflake from plain white paper (A4, letter or square).

Video: youtu.be/X-9fc3WbBfg

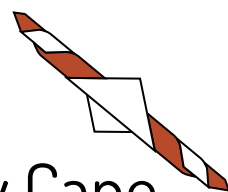
Solve Paint a Holiday

Follow the instructions on the sheet to create a festive image!

Printable sheet: bit.ly/paintaholiday



Make Flying Candy Cane

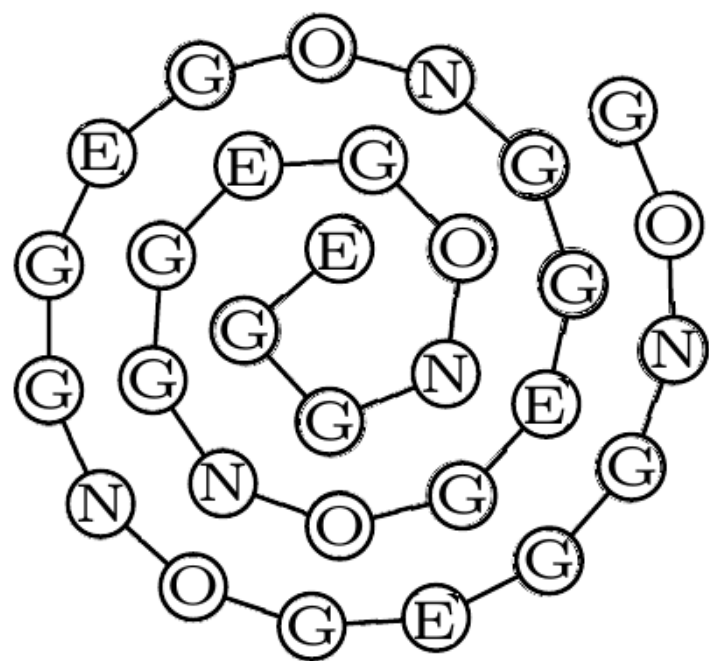
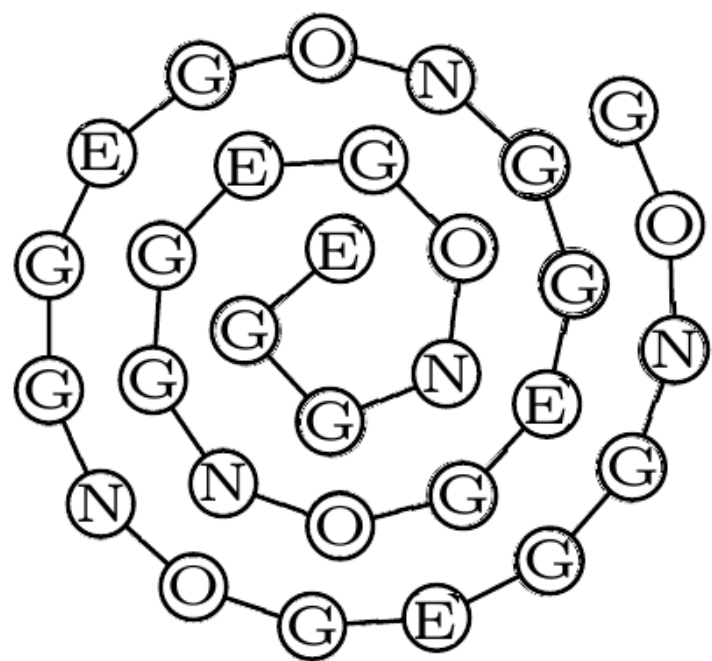
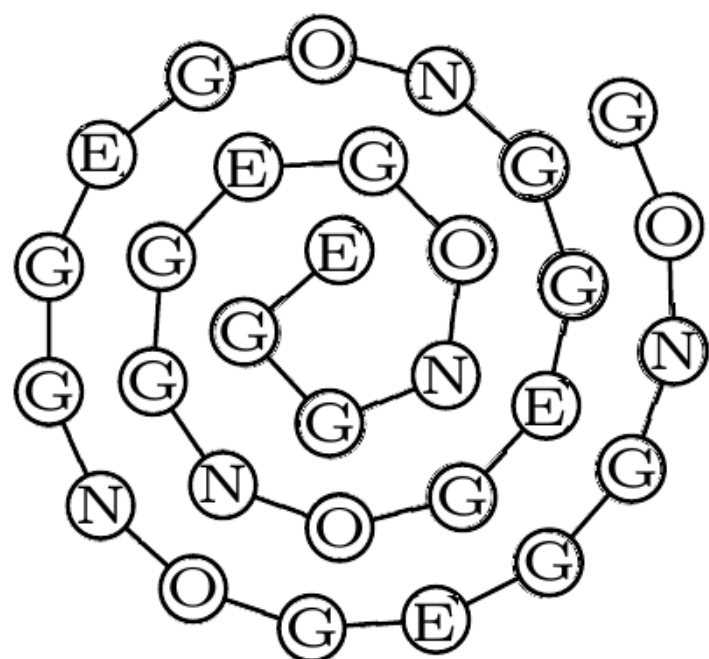
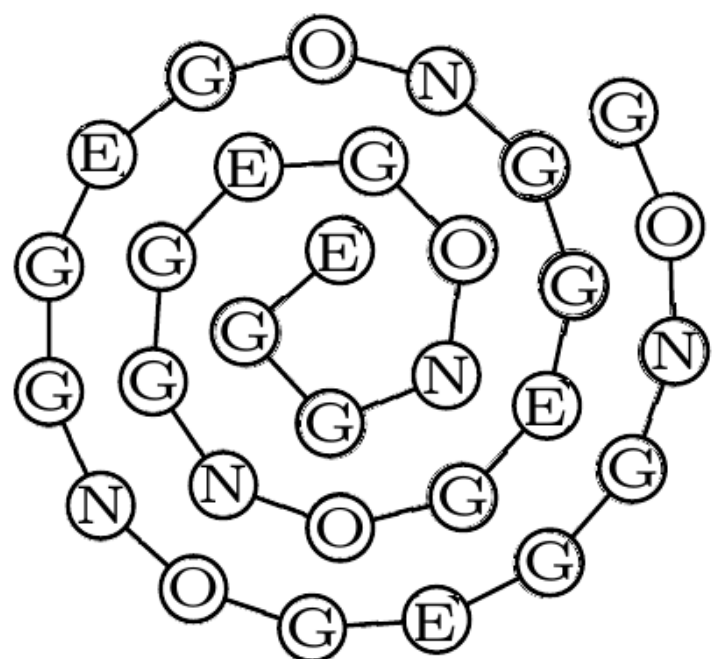
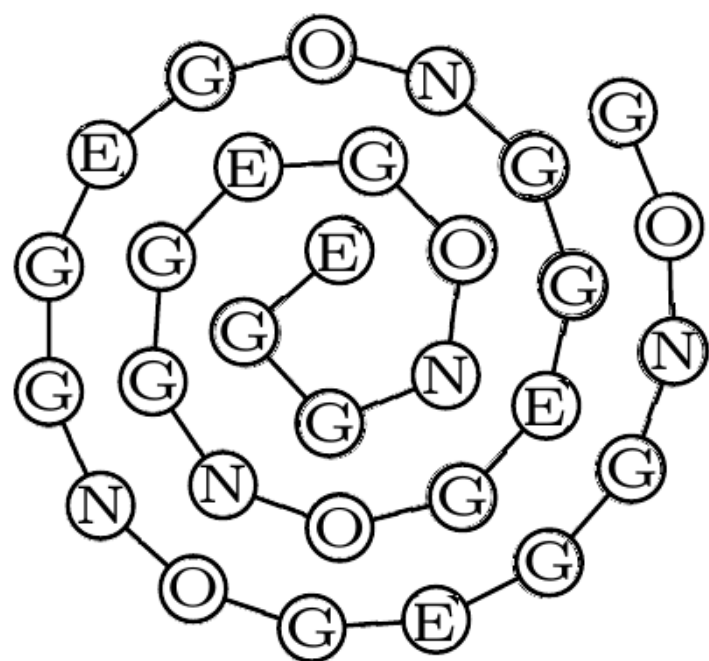
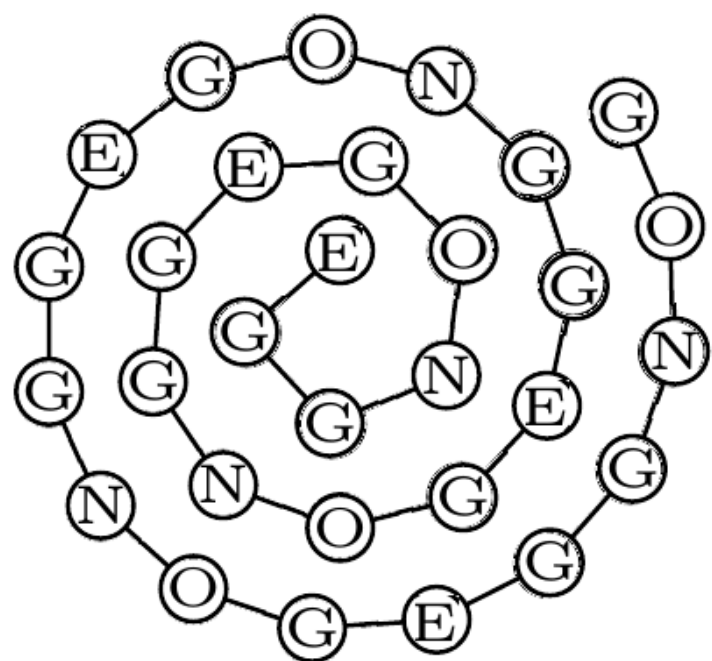


Grab a square piece of double-sided origami paper and make a flying candy cane!

Video: youtu.be/TLKKPCOn6xA

MathsJam Shout is a monthly sheet of ideas for activities to do at a MathsJam night. It's created using suggestions from a different MathsJam each month, and if you'd like to submit suggestions for a month in the future, email katie@mathsjam.com for details.

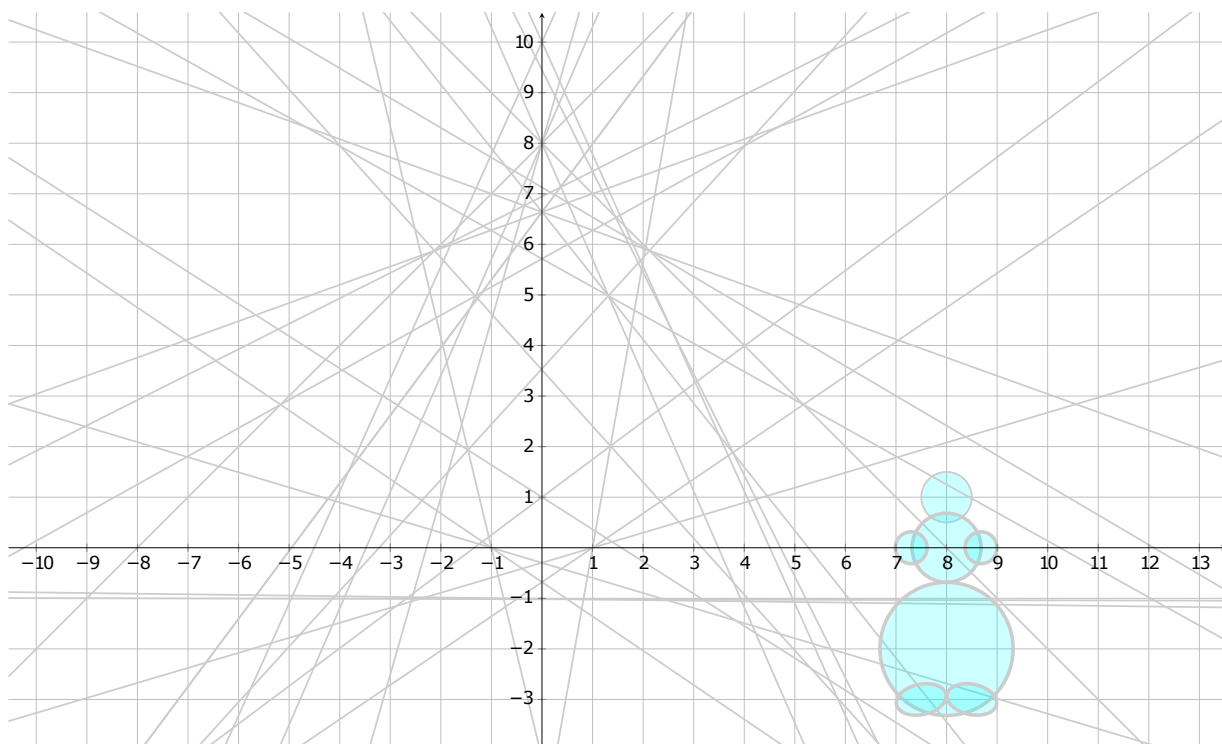
MathsJam is a monthly opportunity for like-minded self-confessed maths enthusiasts to get together in a pub and share stuff they like. Puzzles, games, problems, or just anything they think is cool or interesting. Monthly MathsJam nights happen in over 70 locations around the world, on the second-to-last Tuesday of each month. To find your nearest MathsJam, visit the website at www.mathsjam.com.



Paint a Holiday!

by Yuliya Nesterova

Complete the holiday postcard by tracing the lines over their prescribed domains.
Can you guess the picture?



$$6.64 - 0.36x$$

$$x \in \left[-1, -\frac{7}{20}\right]$$

$$6.64 + 0.36x$$

$$x \in \left[\frac{7}{20}, 1\right]$$

$$8 - x$$

$$x \in [0, 1]$$

$$0.3x - 0.3$$

$$x \in [1, 4]$$

$$8 + x$$

$$x \in [-1, 0]$$

$$10 - 2.2x$$

$$[0, 0.5] \cup [3.7, 4]$$

$$8 - 2.3x$$

$$x \in [-0.4, 0]$$

$$-0.3x - 0.3$$

$$x \in [-4 : -1]$$

$$8 + 2.3x$$

$$x \in [0, 0.4]$$

$$10 + 2.2x$$

$$[-4, -3.7] \cup [-0.5, 0]$$

$$5.7 + 0.5x$$

$$x \in [0, 0.5]$$

$$1 - 0.75$$

$$x \in [-1.5, 0]$$

$$5.7 + 0.5x$$

$$x \in [-5.3, -1.5]$$

$$7 - \frac{3}{5}x$$

$$x \in [0.5, 2]$$

$$6.63 - 1.26x$$

$$x \in [0, 0.5]$$

$$7 + \frac{3}{5}x$$

$$x \in [-2, 0.5]$$

$$3.5 + x$$

$$x \in [-1.5, 0]$$

$$3.5x - 1.1$$

$$x \in [-2, -1.5]$$

$$3.5 - x$$

$$x \in [0, 1.5]$$

$$3.5 + 1.1x$$

$$[1.5, 2]$$

$$5.72 - \frac{x}{2}$$

$$x \in [-0.5, 0] \cup [1.32, 5.3]$$

$$0.68x - 0.68$$

$$x \in [3.7, 5.3]$$

$$5.7x - 5.7$$

$$x \in [0.82, 1]$$

$$0.68x + 1$$

$$x \in [0, 1.5]$$

$$\frac{-x}{100} - 1$$

$$x \in [-0.82, 0.82]$$

$$6.6x + 1.3x$$

$$x \in [-0.5, 0]$$

$$-4.2x - 4.2$$

$$x \in [-1, -0.82]$$

$$-0.68x - 0.68$$

$$x \in [-5.3, -3.8]$$