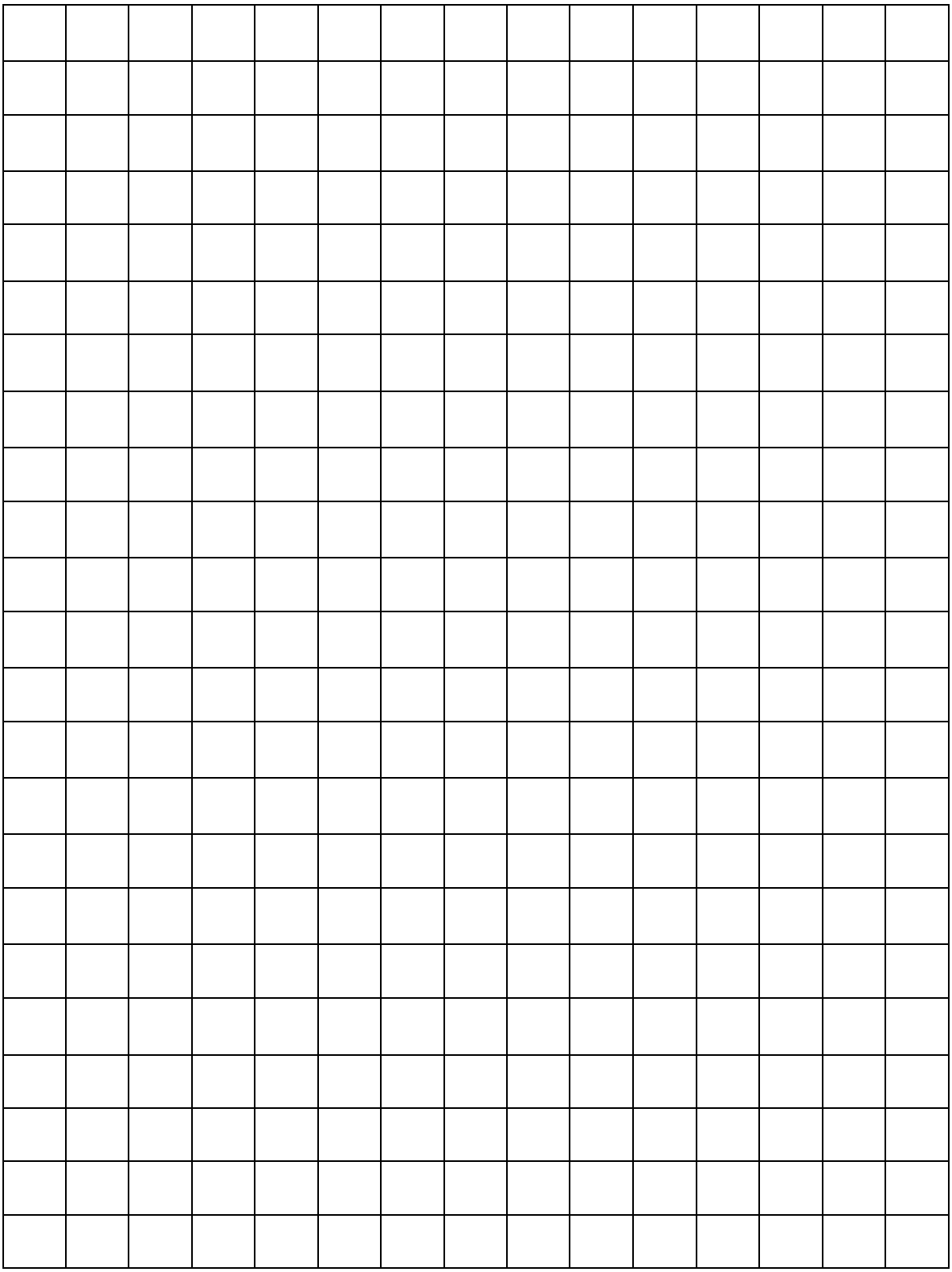

NORMAL DISTRIBUTION COLORING SHEET, created by Sondra Eklund, www.sonderbooks.com

NORMAL DISTRIBUTION COLORING SHEET INSTRUCTIONS

You can get a visual feel for the normal distribution, similar to what I did in the Normal Distribution Scarf if you color the grid like this:

Choose 4 colors. For the scarf I used brown, burgundy, bright red, and then a rainbow-colored gradually changing yarn. Using colors that don't change, I recommend starting plain and getting brighter.

Generate random numbers from a normal distribution. I went to the website www.random.org/gaussian-distributions/ Generate 330 numbers. Keep it with a mean of 0 and standard deviation 1. You can change it to 2 significant digits.

Note that they are given in exponential notation. If the number after the e is negative, move the decimal point to the left that many places. If it is zero, don't move the decimal point.

A normal distribution is a bell-shaped curve. Use your plainest color for the colors in the middle, and get brighter as you go outward. This will show that the outliers make it beautiful!

For the scarf I used:

From -0.5 to 0.5, I used brown, Color A.

From -1.0 to -0.5 and 0.5 to 1.0, I used a brownish burgundy, Color B.

From -1.5 to -1.0 and 1.0 to 1.5, I used bright red, Color C.

For numbers less than -1.5 and bigger than 1.5, I used the rainbow yarn, Color D.

Choose a starting point and an order you're going to color the grid. Then assign the colors according to those values.

You can also use more colors and go further out. Or maybe try using a distance of 0.75 for each color. (0 to 0.75, 0.75 to 1.5, and 1.5 to 2.25.)

I'm planning to make another scarf, but I'm going to try out some more combinations with this coloring sheet first!

For descriptions of my mathematical knitted objects and more coloring sheets, see

www.sonderbooks.com/sonderknitting/