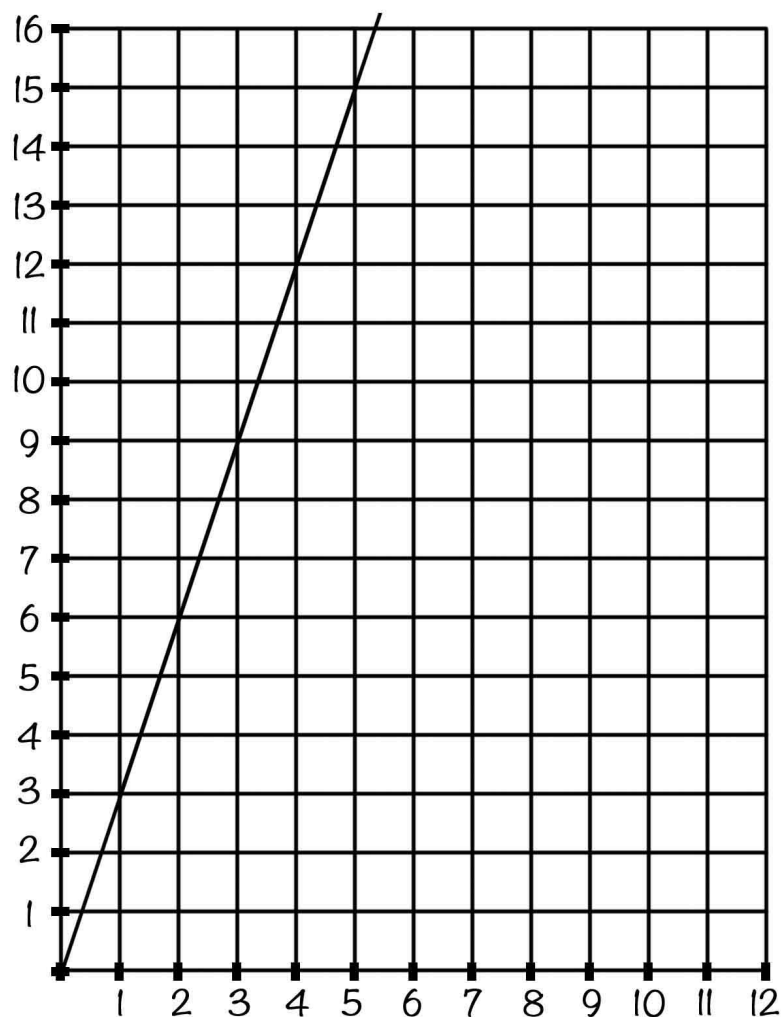


Handout: Lines on a Donut

Suppose we had marked the line $y = 3x$ on a grid:



If we then roll the grid up vertically and horizontally to make a donut:

1. How would that line wrap around our donut?
2. What if we replaced 3 in $y = 3x$ by another integer?
3. What if we replaced 3 in $y = 3x$ by $1/3$?
4. What if we replaced 3 in $y = 3x$ by $1/n$ for another integer n ?
5. What if we replaced 3 in $y = 3x$ by p/q ?