

Task: A Special Sphere (companion notes)

The Conundrum:

Consider the "function" from the integers to the integers, which takes:

$$x \rightarrow x/2.$$

This works for even numbers, but odds present a problem. ...

Where does 3 go? ... $3/2$ isn't an integer!

Challenge:

What is the smallest extension you could make to the "where the function goes from-to" so that "division by 2" makes sense?