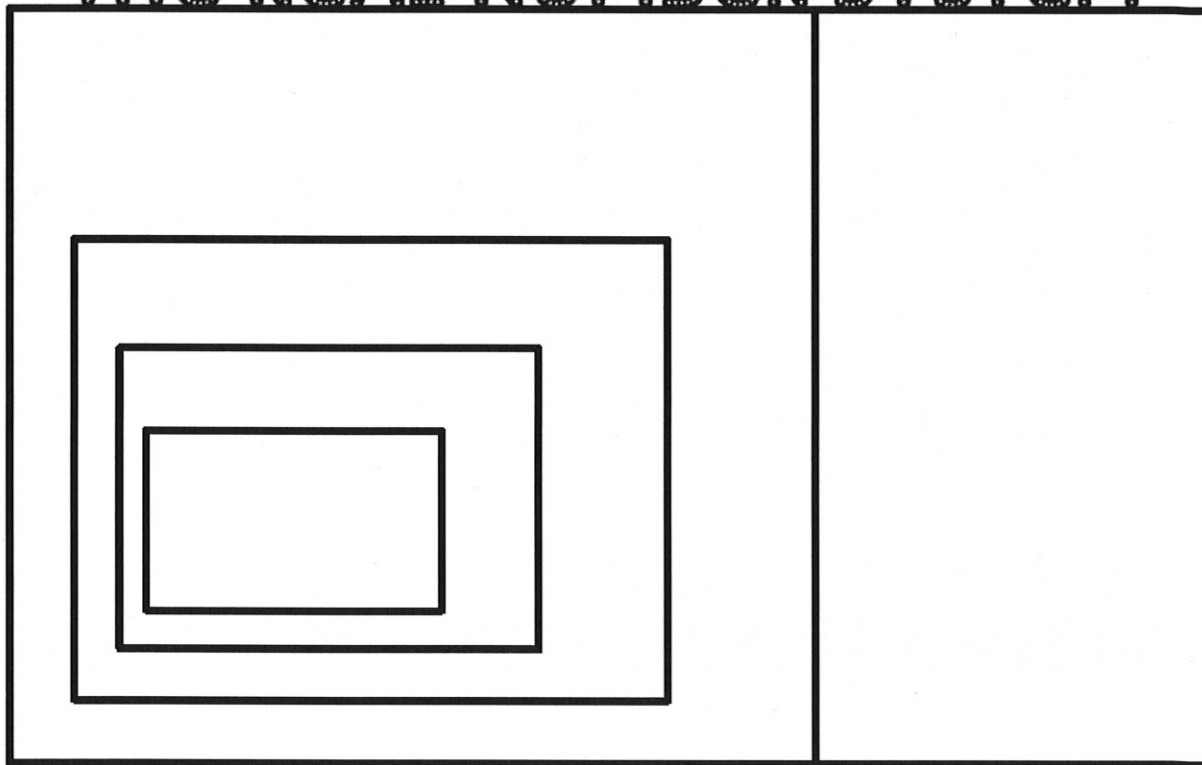


Notes:

# THE REAL NUMBER SYSTEM



Natural Numbers  $\mathbb{N}$

Whole Numbers  $\mathbb{W}$

Integers  $\mathbb{Z}$

Rational Numbers  $\mathbb{Q}$

Irrational Numbers  $\overline{\mathbb{Q}}$

Real Numbers  $\mathbb{R}$

*Note: Q is for quotient - which is how rational numbers are identified. Z is for Zahlen - the German word for integers.*

**Try: Place the following numbers in the graphic organizer above.**

0, 4, -9,  $\frac{-5}{3}$ ,  $\sqrt{4}$ ,  $-\frac{14}{7}$ ,  $\sqrt{17}$ ,  $-\bar{4}$ ,  $\pi$ ,  $3^3$ , 2.9,  $\frac{\sqrt{3}}{2}$ , .23,  $\sqrt{49}$ , -11, 117,  $-5\pi+1$ ,  $\frac{1}{9}$

**Directions: Check ALL the boxes that apply to each number.**

|                                    | Natural | Whole | Integer | Rational | Irrational | Real |
|------------------------------------|---------|-------|---------|----------|------------|------|
| 1. $-789$                          |         |       |         |          |            |      |
| 2. $\pi$                           |         |       |         |          |            |      |
| 3. $\sqrt{0.36}$                   |         |       |         |          |            |      |
| 4. $-\frac{2}{3}$                  |         |       |         |          |            |      |
| 5. $0$                             |         |       |         |          |            |      |
| 6. $4.1439\dots$<br>Doesn't repeat |         |       |         |          |            |      |
| 7. $\frac{-5}{-5}$                 |         |       |         |          |            |      |
| 8. $2\frac{1}{9}$                  |         |       |         |          |            |      |
| 9. $1.\overline{48}$               |         |       |         |          |            |      |
| 10. $\sqrt{4}$                     |         |       |         |          |            |      |

When you are done, compare your answers with the people around you.