

# Consider two mathematical models of real world things



- Distance
- Time
- We map positions and times into numbers.  
What kinds of numbers are we mapping to?

1. Integers

2. Rational numbers

3. Real numbers

A. All numbers (+,0,-)

B. Non negative only

C. Positive only

Which equation represents the quantity on the left?



- |                                   |                         |
|-----------------------------------|-------------------------|
| A. The area of a circle.          | 1. $2\pi R$             |
| B. The volume of a sphere.        | 2. $4\pi R^2$           |
| C. The circumference of a circle. | 3. $\frac{4}{3}\pi R^3$ |
| D. The surface area of a sphere.  | 4. $\pi R^2$            |