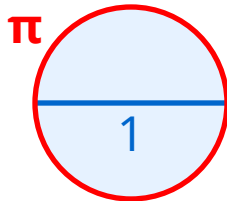


Useful Numbers

The most useful *irrational* numbers.

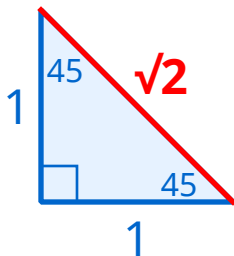
$$\pi = 3.14159\dots$$

pi



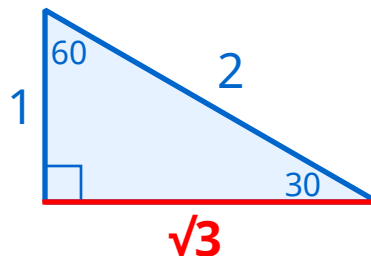
$$\sqrt{2} = 1.414\dots$$

square root of 2



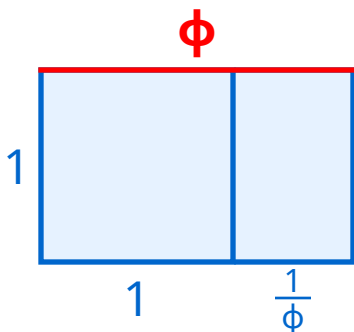
$$\sqrt{3} = 1.732\dots$$

square root of 3



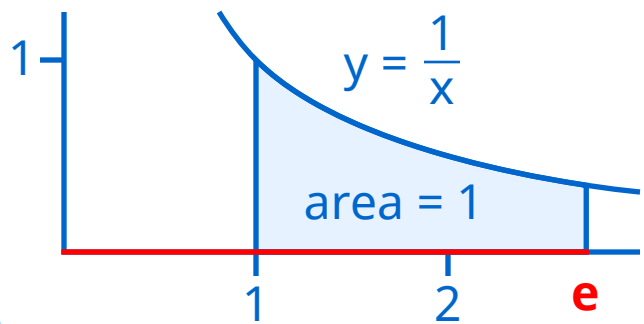
$$\phi = 1.618\dots$$

phi
golden ratio



$$e = 2.718\dots$$

Euler's number
Napier's constant



Memorize a few digits of each of these mathematical constants.
You will use π , $\sqrt{2}$, and $\sqrt{3}$ in simple geometry, ϕ and e in higher mathematics.