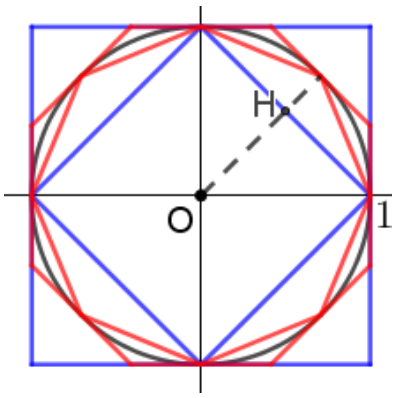
ASPECTS HISTORIQUES

ARCHIMEDE

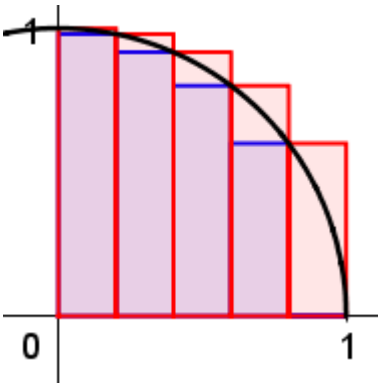


Suite Limite Pythagore

```
def Archimède(n):
    U=sqrt(2)
    for i in range(1,n-1):
        OH=..............
        U=..............
    demi-périmètre=.....
    return .....
```

RECTANGLES

$f : x \mapsto \sqrt{1-x^2}$

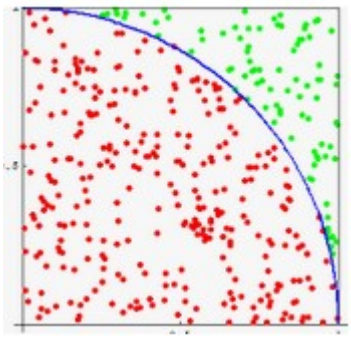


Suites adjacentes Intégrale
Limite

```
def Rectangles(n):
    U,V=0,0
    for i in range (1,n+1):
        U=...........
        V=...........
        erreur=........
    return .............
```

π

MONTE-CARLO



$f : x \mapsto \sqrt{1-x^2}$

Simulation Fréquences
Loi des grands nombres

```
def MonteCarlo(n):
    points= 0
    for i in range(n):
        x=......
        y=......
        if .........:
            ...........
    return ........
```

Comparaison de méthodes

Avantages Inconvénients

Vitesse de convergence