

Ruby and  $\pi$ 

**Christopher Mark Gore** 

cgore.com

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Happy π Day!

## What is $\pi$ ? Apple pie?

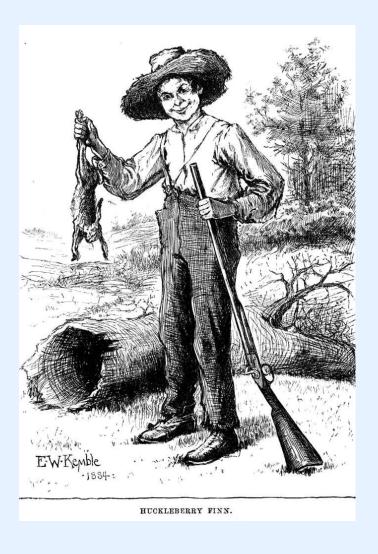




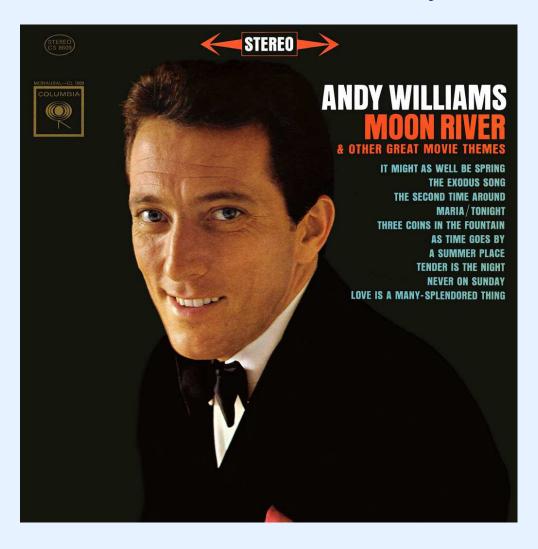
### What is $\pi$ ? Huckleberry pie?



### What's a huckleberry?



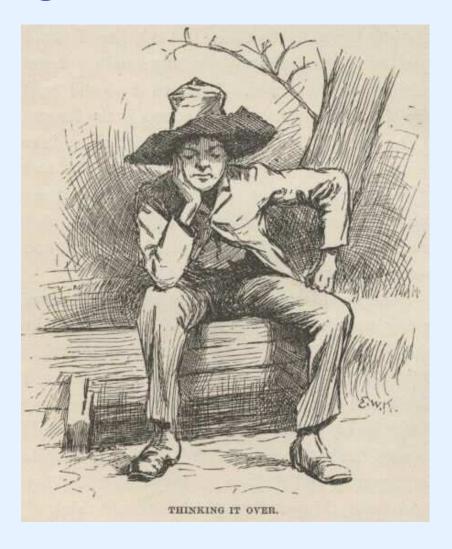
#### What's a huckleberry?



### Huckleberry? It's basically a blueberry.



#### We're going to need to think about this one.



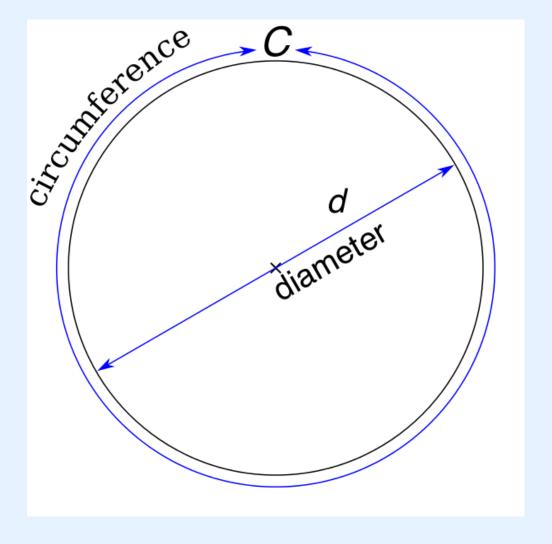
#### What is $\pi$ ?

3.1415926535897932384626433832795028841971693 427577896091736371787214684409012249534301465...

# You can get a greatly abbreviated approximation of $\pi$ in Ruby quite easily.

```
1 Math::PI
2 => 3.141592653589793
3 Math.sin Math::PI
4 => 1.2246467991473532e-16
5 Math.cos Math::PI
6 => -1.0
7 Math.tan Math::PI
8 => -1.2246467991473532e-16
9 2 * Math.asin(1)
10 => 3.141592653589793
11 Math.acos -1
12 => 3.141592653589793
```

 $\pi$  is the ratio of a circle's circumference to it's diameter,  $\pi = \frac{C}{d}$ .



 $\pi$  is an irrational number.

 $\pi$  is a transcendental number.

