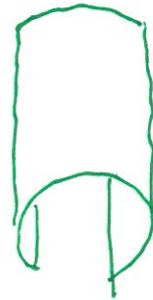
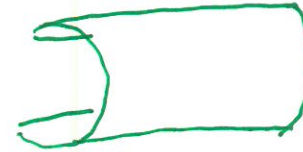


Wrapping Problem

World



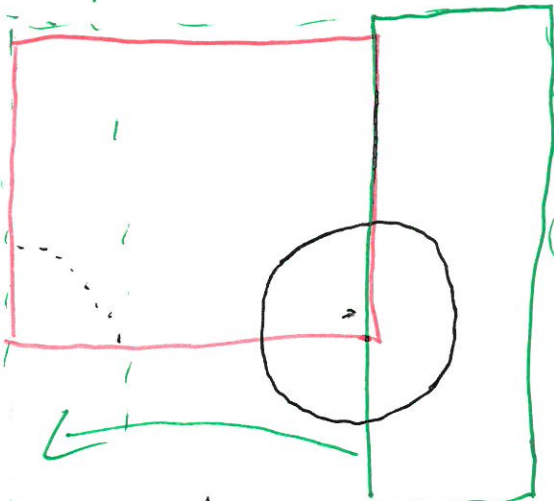
Left \leftrightarrow Right
wrapping



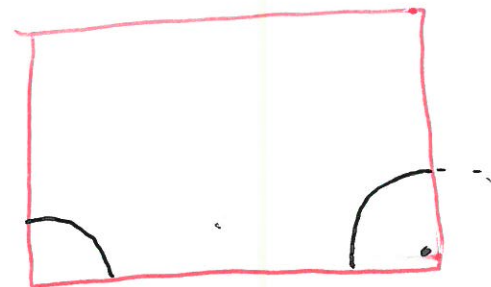
Top \leftrightarrow Bottom
wrapping

Both?

? wrap ? collision detection

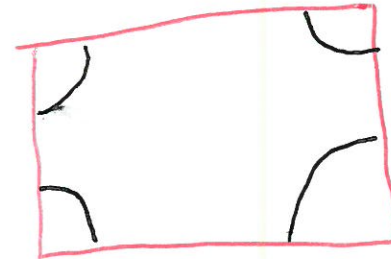
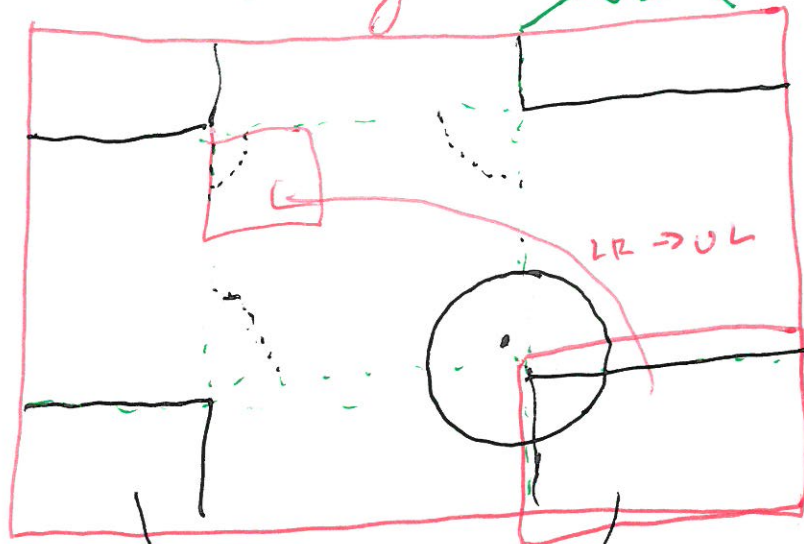


Layer must
be transparent.



It's right if we
see all the circle

Wrapping 2.0



Left \leftrightarrow Right
Top \leftrightarrow Bottom

Evil
Corner to corner wrapping
UL \rightarrow LR
LR \rightarrow UL

How many calls?

1 main Draw

2 R \rightarrow L

3 L \rightarrow R

4 T \rightarrow B

5 B \rightarrow T

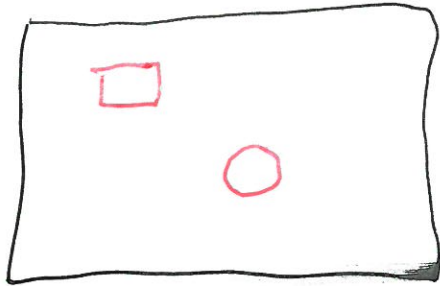
6 UL \rightarrow LR

7 LR \rightarrow UL

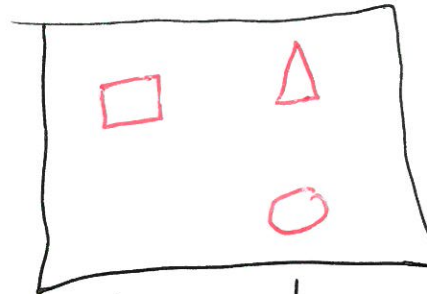
8 LL \rightarrow UR

9 UR \rightarrow LL

Glow buffers



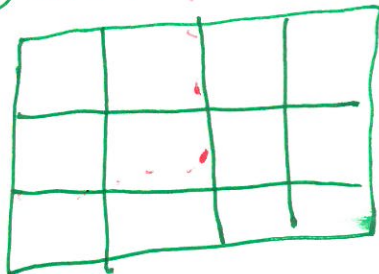
Blur layer
Behind



Normal
Layer
In front

Draw glowy
game objects

Blur?



Kernel



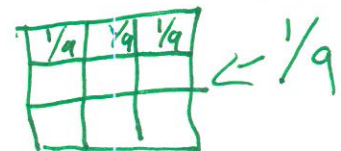
Identity
Kernel



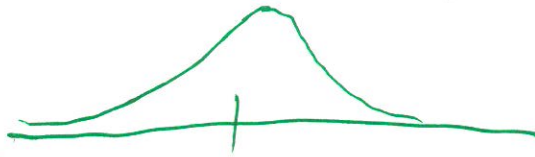
Edge
Kernel



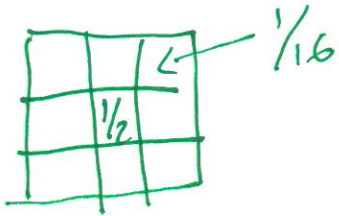
Blur → Bad
Kernel Blur



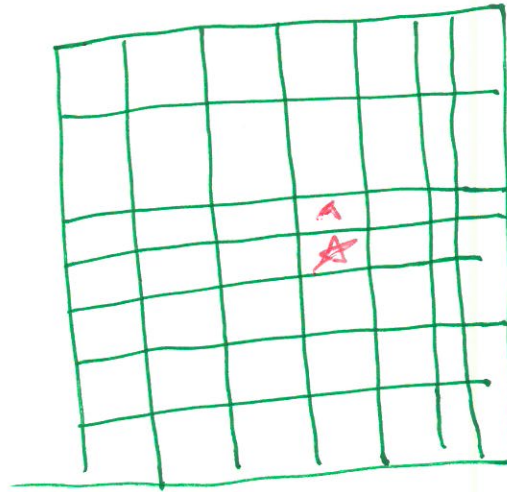
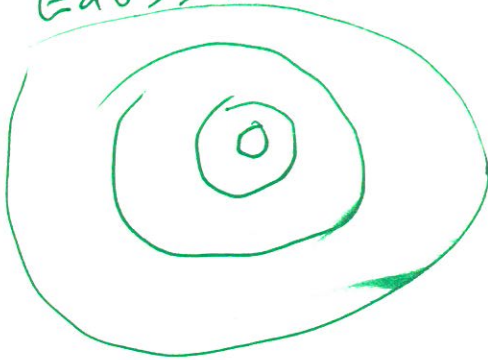
Good Blur



Gaussian
Blur



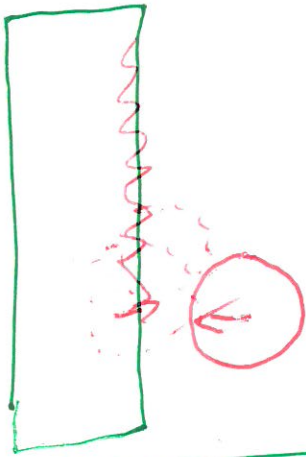
Gaussian Curve in 3D



Slow
w/o
GPU

Built in blur works everywhere but
Safari.

Fast Moving Object



problem

Solution.

A. Don't just flip ball direction
what side of the paddle am I on?
what is my velocity
- if velocity points away from
the paddle, don't flip

B. What about penetration

1. Dynamic Time Scaling

↳ Don't do this in 2510

2. Bump Solution

↳ Recursion problem

