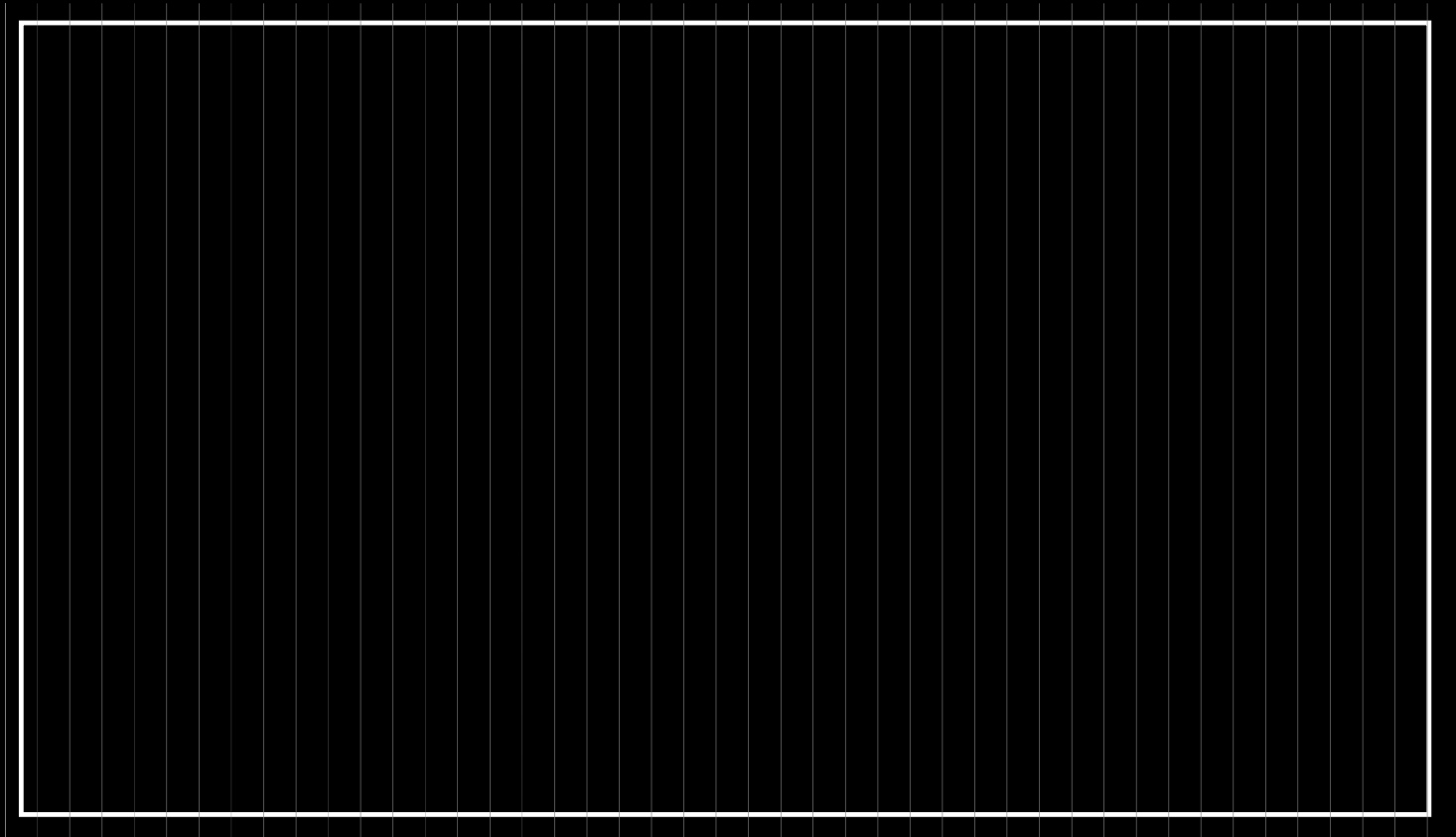


## Drag Canvas & Draw Canvas Grid

We are going to draw a series of vertical lines starting just outside the dimensions of the screen



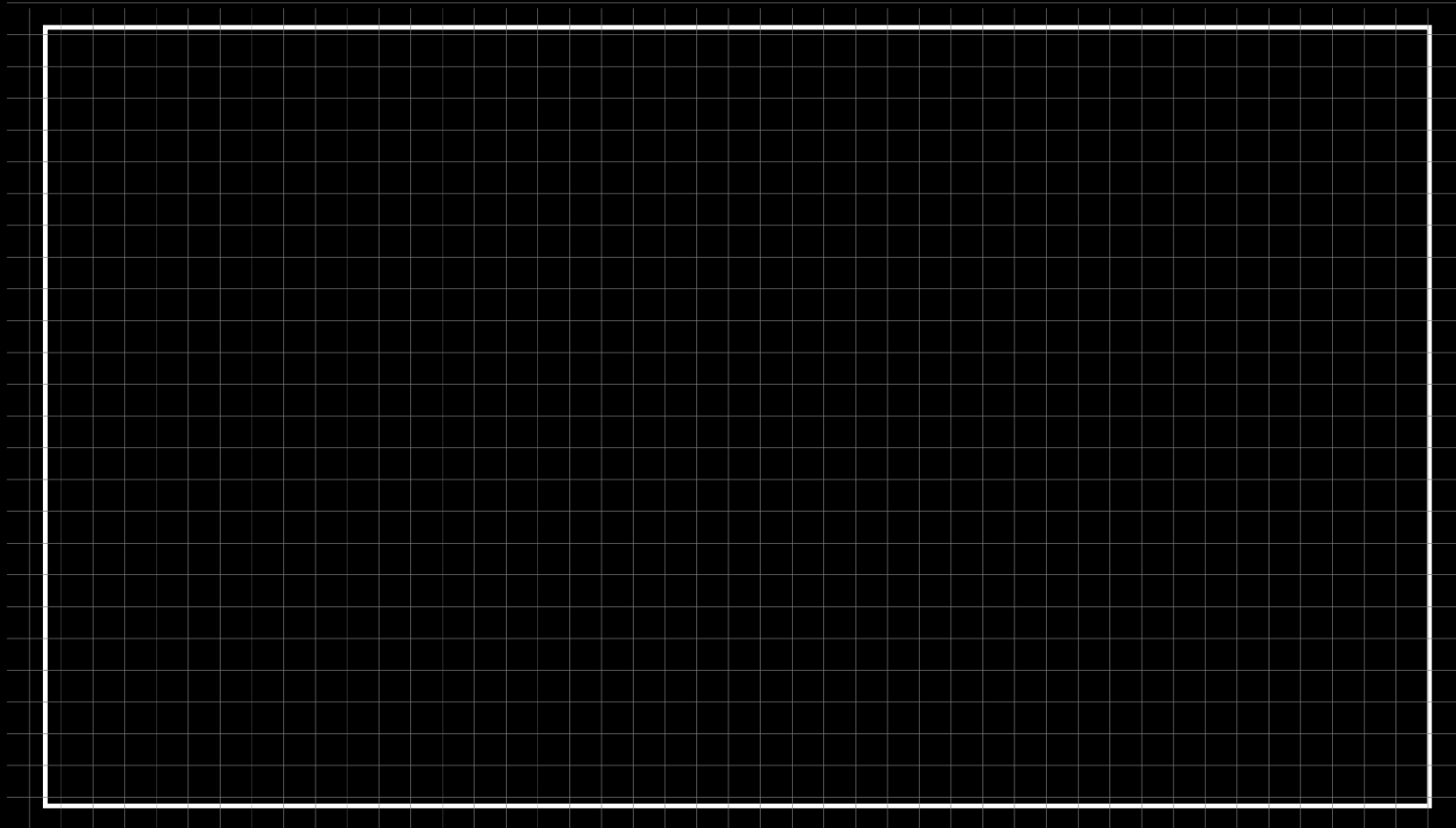
## Drag Canvas & Draw Canvas Grid

And we are also going to draw a series of horizontal lines – again starting just outside the dimensions of the screen so that the grid appears continuous



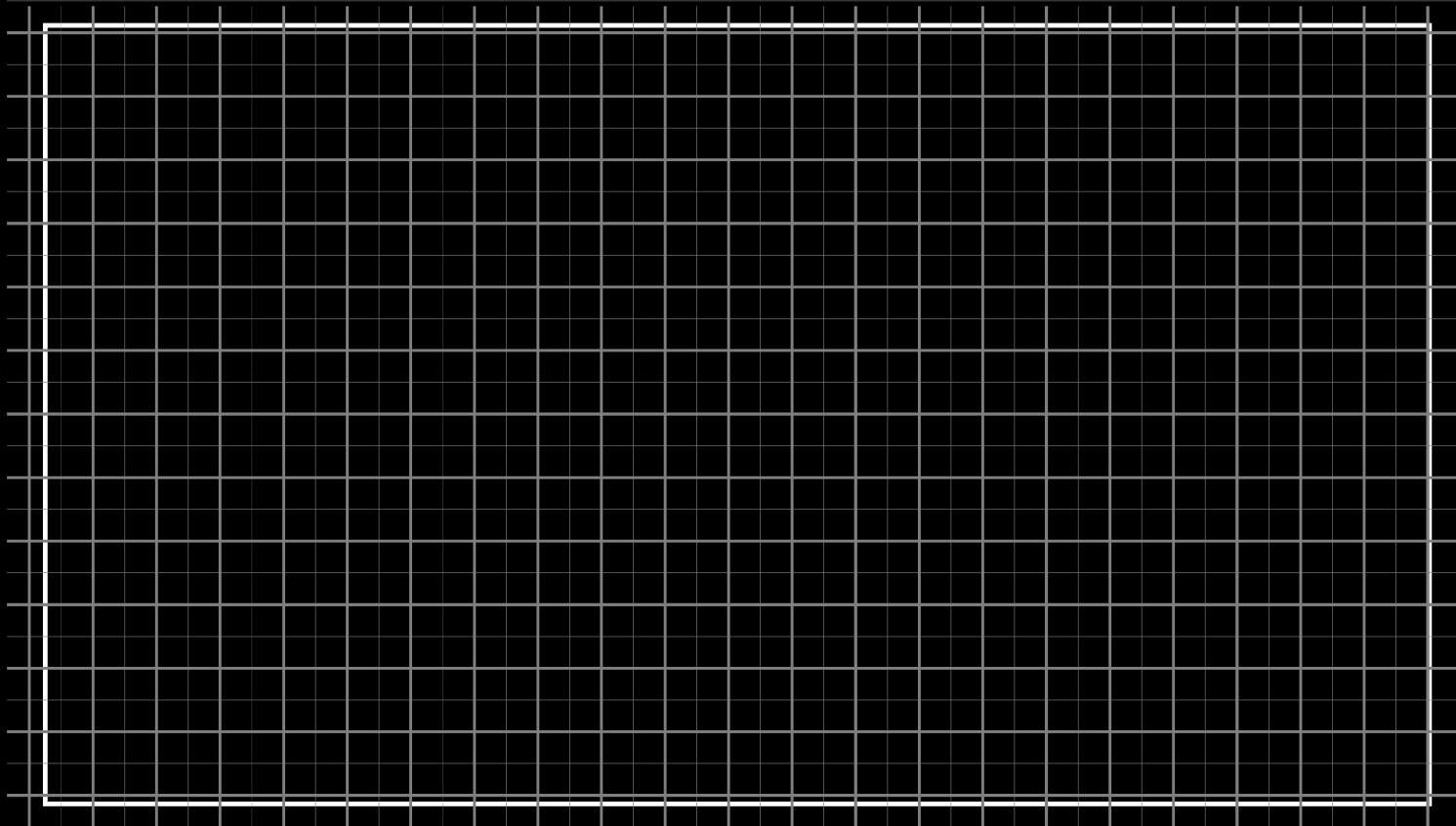
## Drag Canvas & Draw Canvas Grid

When the vertical and horizontal  
lines are drawn over each other  
we will get a grid



## Drag Canvas & Draw Canvas Grid

We'll control in the code how big each grid square will be, and the opacity of the grid lines, and we'll actually draw 2 different sizes of grid lines with different line opacities to create a 'graph paper' style grid.

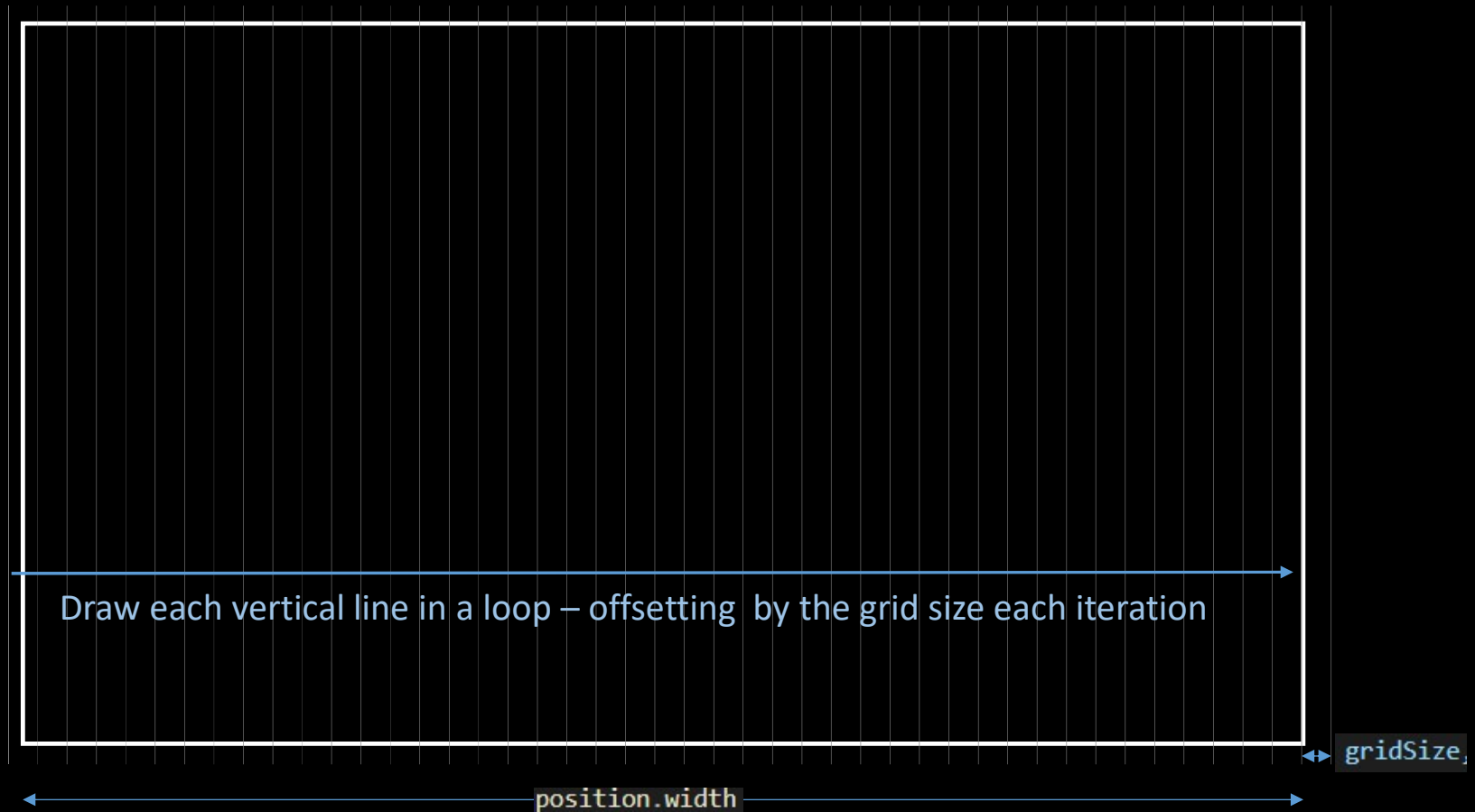


# Drag Canvas & Draw Canvas Grid

To calculate the number of vertical lines that we'll need we'll use the following formula :-

```
int verticalLineCount = Mathf.CeilToInt((position.width + gridSize) / gridSize);
```

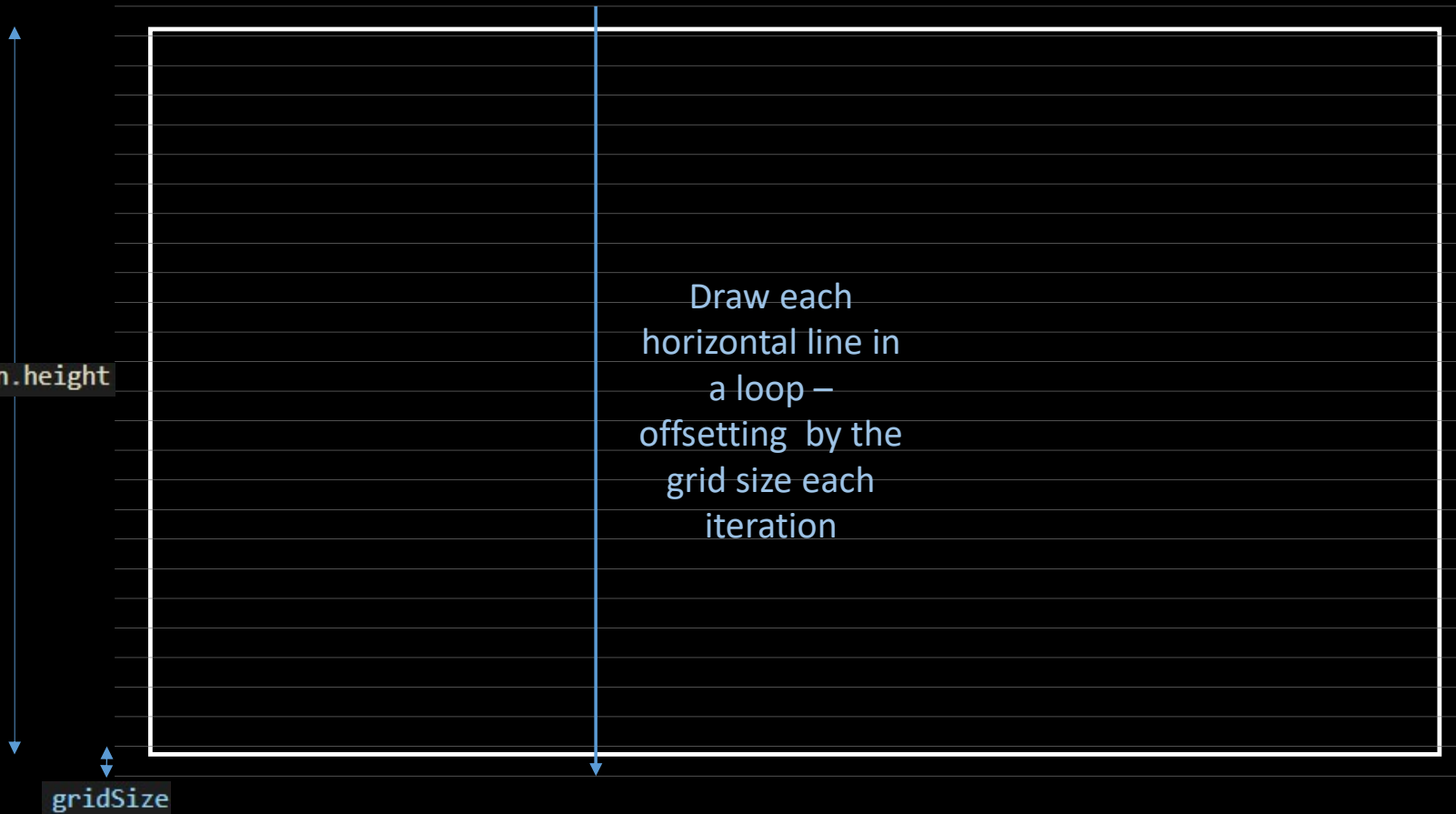
We'll calculate how many vertical lines we need to draw by using the width of the screen and the grid size. Then we'll loop that many times and offset the draw position by the grid size each iteration to draw vertical lines across the whole width of the screen



# Drag Canvas & Draw Canvas Grid

To calculate the number of horizontal lines that we'll need we'll use the following formula :-

```
int horizontalLineCount = Mathf.CeilToInt((position.height + gridSize) / gridSize);
```



In a similar way, we'll calculate how many horizontal lines we need to draw by using the height of the screen and the grid size. Then we'll loop that many times and offset the draw position by the grid size each iteration to draw horizontal lines across the whole height of the screen

## Drag Canvas & Draw Canvas Grid

We'll then use the editor DRAG event to detect a left mouse button down drag event on the canvas. When we are dragging we'll move the RECT position all of the nodes created by the drag Delta amount.

We'll also adjust the canvas grid position by off-setting where we start drawing the vertical and horizontal lines by the drag amount (scaled to make sure the grid movement is the same as the node movement)

Also change the start draw position for the horizontal and vertical grid lines so that they appear to move with the mouse drag

