0	0	0
0	5	20
0	20	40

New Center Heat =

average: self + left + above + right + below

$$(5 + 0 + 0 + 20 + 20) / 5 = 9$$

0	0	0
0	5	20
0	20	40

What would the indices be?

r = current row (1 for the centerspace)
c = current column (1 for the centerspace)

self + left + above + right + below

 $r,c \qquad \qquad r,\,c-1 \qquad \qquad r-1,\,c \qquad \qquad r,\,c+1 \qquad \qquad r+1,\,c$

0	0	0
0	5	20
0	20	40

Edge Case!

$$r = 2$$

 $c = 1$

$$(r, c)$$
 $(r, c-1)$ $(r-1, c)$ $(r, c+1)$ $(r+1, c)$

How can you tell if a space is out of bounds?