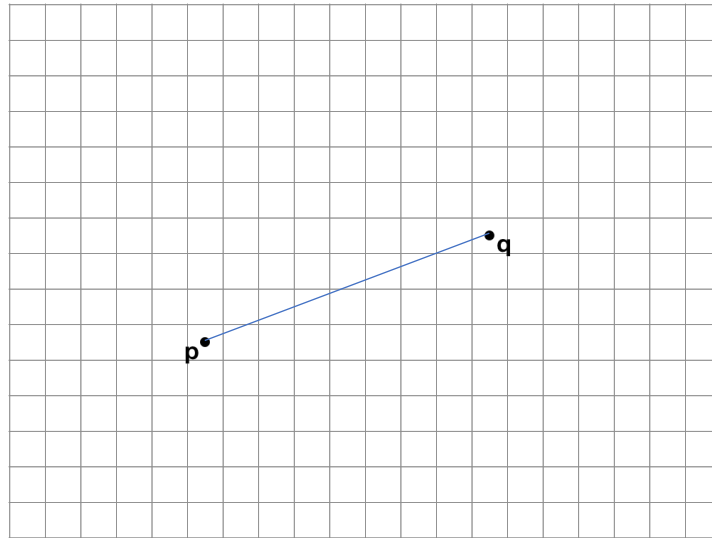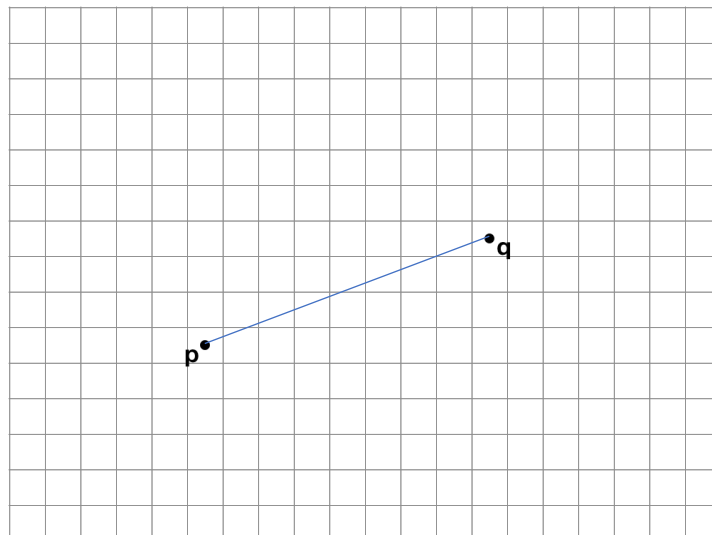## CSCI 480 / 580 – February 24, 2020 – Line Drawing

1. Color pixels in the grid below to form a line between the two points **p** and **q** using the midpoint algorithm.



## CSCI 480 / 580 – February 24, 2020 – Line Drawing

1. Color pixels in the grid below to form a line between the two points **p** and **q**

2. Implement a faster version of `slow_line`, below, by doing as much precomputation as possible before the loop.

```
function slow_line(p1, p2):

// compute m, b
for x = ceil(x0) to floor(x1)
    y = b + m*x
    draw(x, round(y))
```

```
function fast_line(p1, p2):

// compute m, b


for x =


    draw(x, round(y))
```