

1. What pixels would get “coloured” when drawing the line from  $(0,0)$  to  $(2,10)$  if you sampled at consecutive  $x$  values? Is this a good idea?
2. Use the DDA algorithm to draw the straight line from  $(10,7)$  to  $(2,4)$ . Draw a grid so that you can colour in the pixels that get “drawn”.
3. Now use Bresenham’s Line Drawing algorithm to draw the same line. You should colour in exactly the same pixels!
4. Use the Bresenham Circle Drawing algorithm to draw the circle with radius 8 centered at  $(3,-2)$ . Make sure to use the symmetry properties we talked about in class! (If you don’t use the symmetry property and instead continue to “use the formula” above you will get terrible results for the second octant of the circle.)