

# Worksheet: Edge Detection #1

One simple way to find edges is to look at two neighboring pixels and take the difference between their values. If it's big, this means the colors are very different, so it's an edge.

Try it yourself! The grid below is filled with numbers that represent a grayscale image. See if you can detect edges the way a computer would do it. **If the values of two neighboring squares on the grid differ by more than 50, draw a thick line between them.**

21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
21	21	21	21	21	21	21	103	103	21	21	21	21	21	21	21
21	21	21	21	21	21	21	99	103	21	21	21	21	21	21	21
21	21	21	21	21	21	21	91	103	21	21	21	21	21	21	21
21	21	21	21	21	21	21	103	99	21	21	21	21	21	21	21
21	21	21	21	21	21	91	99	103	99	21	21	21	21	21	21
21	72	93	101	103	105	99	103	91	99	104	102	101	91	103	21
21	21	99	99	91	103	99	99	103	99	99	91	99	88	21	21
21	21	21	99	99	91	91	99	103	99	91	99	103	21	21	21
21	21	21	21	99	99	99	99	99	99	99	103	21	21	21	21
21	21	21	21	21	99	103	103	91	103	103	21	21	21	21	21
21	21	21	21	21	103	91	99	99	103	91	21	21	21	21	21
21	21	21	21	103	91	99	99	103	99	103	99	21	21	21	21
21	21	21	21	91	103	99	21	21	99	91	99	21	21	21	21
21	21	21	103	103	21	21	21	21	21	21	103	99	21	21	21
21	21	21	103	3	21	21	21	21	21	21	7	103	21	21	21