

Name: \_\_\_\_\_

COL7(6)83 Quiz 9

Entry no.: \_\_\_\_\_

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1. Suppose we want to segment an image in which the desired object and the background both have smoothly varying intensities spanning the full range  $[0, 255]$ , but there are large intensity gradients along the boundary between the two regions. Assume that the locations of one object pixel and one background pixel are known. Suggest a method for automatic segmentation, requiring as little parameter tuning or post-processing as possible.
2. Will the Harris-Stephens cornerness be large or small if the window is centered at (a) a bright spot on a dark background, (b) a checkerboard pattern, dark in two quadrants and light in the other two, (c) a dark line on a light background, (d) a randomly textured region with high contrast? Briefly explain why in each case.