

Topic 8 problems

1. Suppose that instead of the gamma function discussed in class, video memory values g are related to luminance L by this function:

$$L = k * g + \delta$$

Write a function `rgb2lum(g, k, delta)` that converts the greylevel g to luminance L , using parameters k and δ . Also write the inverse of this function, that converts luminance L to greylevel g , using parameters k and δ .

2. Write a script `caltest.m` that tests the calibration and display routines that we developed in the lecture. The script should show squares of various durations, sizes, and luminances, and check whether the result is correct. To check the duration, use the computer's own clock. To check the size and luminance, have the user measure the size and luminance of the squares you show.