Raster Devices and Images
A raster image is 2D array storing pixel values at each pixel.
virtually all graphics system are raster based

**scanner**
linear array of pixels swept across page to create grid of pixels

**printer**
image is made by depositing ink at points on a grid

**display**
show images as a rectangular array of pixels

**digital camera**
image sensors made of grid of light-sensitive pixels
Human color vision (Trichromacy)
Color Representation

Additive RGB

Subtractive CYMK
Human color vision vs. RGB

sRGB color triangle

comparison of color gamuts
Raster Display

get different colors by combining red, green, and blue subpixels
Color Raster Image

- R,G,B values stored at each pixel location
- each pixel value represents average color of the image over that pixel’s area