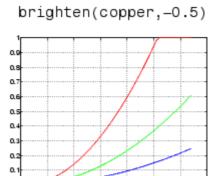
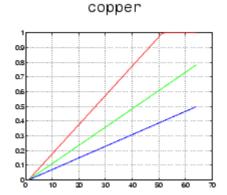




Altering Colormaps

Because colormaps are matrices, you can manipulate them like other arrays. The brighten function takes advantage of this fact to increase or decrease the intensity of the colors. Plotting the values of the R, G, and B components of a colormap using rabplot illustrates the effects of brighten.





NTSC Color Encoding

The brightness component of television signals uses the NTSC color encoding scheme.

```
b = .30*red + .59*green + .11*blue
= sum(diag([.30 .59 .11])*map')';
```

Using the nonlinear grayscale map,

```
colormap([b b b])
```

effectively converts a color image to its NTSC black-and-white equivalent.

■ Example -- Mapping Surface Curvature to Color

Truecolor Surfaces



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